GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nu	- nucleic search, using sw model	
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Title: Perfect score: Sequence:		
Scoring table:		
Searched:	3470272 seqs, 21671516995 residues	
Total number of	er of hits satisfying chosen parameters: 6940544	
Minimum DB seq Maximum DB seq		
Post-processing:	ssing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	
Database .		

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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SUMMARIES		E17299				AB095952			AF282898		AB024945	AF157565	AB102786	PST438269	PST5663	XSP012090	AR362443	RSP249207	AF091716	Arusysss Parorei	AY125981	AF010471	AY208917	PAU86603	PSENAPDOXA	AB004059	AX655393	AP003011 AB098505	AF360864	AX655393	AE008048	ACA564846		ABU24/41 AF429315		ALIGNMENTS	990 bp e which convert	N	X. ATING FROM MICRO
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Les 990; Conservative 0; Mismatches 0;
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ATPARTWHGKRGYITEHFDLAEFRDQALDMYLCGPPPWVBSIKQMLDTQALDQTRLYY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cloning of genes involved in carbazole degradation of Pseudomonas sp. strain CA10: nucleotide sequences of genes and characterization of meta-cleavage enzymes and hydrolase J. Bacteriol. 179 (15), 4841-4849 (1997) 97386424
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pseudomonas resinovorans
Pseudomonas resinovorans
Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
Pseudomonadaceae; Pseudomonas.
                              6558 CATCAGGTTGTAGCCAGCCAGCGTGAAACCCTACCGGAATACGTAATTTATCTTGCC
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841 CATCAGGTTGTCGACGCAGCGCTGCTTGAAACCCTACCGGAATACGAAATTTATCTTGCC
                                                                                                 GGTCCACCCCTATGGTCGACGCTACTGTCCGTATGCTCCTCCGCCAAGGGTGTTCCACGC
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Omori,T.
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function="putative membrane spanning protein"
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Nojiri,H., Omori,T. and Habe,H.
Direct Submission
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33774

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circular BCT 03-MAY-2003
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                                                                                        33715 TIGGICTCAGCACTIGCTAATGGTAITGGATTTCCGTACGAGTGTGCATCGGAGGTGG
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100.0%; Score 990; DB 1; Length
Best Local Similarity 100.0%; Pred. No. 1.6e-256;
Matches 990; Conservative 0; Mismatches 0; Indels
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                                                                                                                                  Pseudomonas resinovorans
Pseudomonas resinovorans
Bacteria, Proteobacteria, Gammaproteobacteria, Pseudomonadales,
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Nojiri,H., Shintani,M. and Maeda,K.
Nojiri,H., Shintani,M. and Maeda,K.
Submission
Submitted (22-UUJ-2002) Hideaki Nojiri, Biotechnology Research
Center, The University of Tokyo; 1-1-1 Yayoi, Bunkyo-ku, Tokyo
113-6657, Japan (E-mailianojiri@mail.ecc.u-tokyo.ac.jp,
Inl: 81-3-5841-3064, Exx:81-3-5841-8030)
          plasmid pCAR1, complete sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene="ORF31"
function="putative membrane spanning subunit"
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complement (1108. .1929)
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evidence=not_experimental
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       Pseudomonas resinovorans
AB088420
AB088420.1 GI:26106080
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                           CICICAGACCIGCGGAICAAAGICGCAGIGCAGGACAAGIACGICCCAACGAIICCAAIC 33932
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   AB001723 6880 bp DNA linear BCT 07-JUL-1
Pseudomonas stutzeri carbazole catabolic genes, complete cds,
clone:pSB188.
AB001723 G1:3293057
AB001723.1 G1:3293057
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Pseudomonas stutzeri
Bacteria, Proteobacteria, Gammaproteobacteria, Pseudomonadales,
Pseudomonadaceae, Pseudomonas.
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100.0%; Score 990; DB 1; Length 199035;
Best Local Similarity 100.0%; Pred. No. 1.7e-256;
Matches 990; Conservative 0; Mismatches 0; Indels 0;
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REFERENCE AUTHORS TITLE JOURNAL

FEATURES

CDS

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                                                                Direct Submission
Submitted (10-MAR-1997) Naoki Ouchiyama, Chemicals Inspection &
Submitted (10-MAR-1997) Naoki Ouchiyama, Chemicals Inspection &
Testing Institute, Kurme Research Laboratories; Chuo-machi 19-14,
Kurume, Fikuoka 830, Japan (E-mail:KYS04304@niftyserve.or.jp,
Tel:0942-34-1500, Fax:0942-39-6804)
Location/Qualifiers
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2 (bases 1 to 6880)
Ouchlyama, N.
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Divergent structures of carbazole-degrading car operons isolated from several gram-negative bacteria
L Unpublished
E 3 (bases 1 to 2007)
S Nojiri, H. and Inoue, K.
Direct Submission
L Submission
L Submission
L Submitted (11-NOV-2002) Hideaki Nojiri, Biotechnology Research Center, The University of Tokyo, 1-1-1, Yayoi, Bunkyo-ku, Tokyo 113-8657, Japan (E-mail:anojiri@mail:ecc.u-tokyo.ac.jp,
Tel:81-3-5841-3067, Fax:81-3-5841-8030)
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Janthinobacterium sp. J3 car operons, partial and complete cds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Widada,J., Nojiri,H., Nakai,S., Inoue,K., Shintani,M., Yoshida,T., Habe,H. and Omori,T.
Molecular diversity of carbazole-utilizing bacteria and their catabolic genes
Unpublished
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Oxalobacteraceae; Janthinobacterium.
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Janthinobacterium sp. J3
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                                                                                                                                                                                                                              Length 20017;
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       AGDADAASTRVAAHVRHTSKLLYSLPDHFFNSD"

complement (8620 . 3880)

gene="ORFU12"

complement (8620 . 3880)

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                                                                                                                                                                                                                                  88.0%; Score 871.6; DB 1;
ilarity 92.5%; Pred. No. 1.6e-224;
Conservative 0; Mismatches 74;
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Best Local Simil
Matches 916; (
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NGGAKYSI PHOTGQIITGNSIQLLFPYQSGNFRNITMIYHGDISSWTFVLESAQPDGSWK
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DNRKFHSLILKIAGNSHLPKLLDQLQFPIFQSAFFRNYDANIYQNSTAEHYEILQAIL
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NNPMYTLHRIR"
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/gene="carR"
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5647. .6171
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GTCGTCCAGGCAGTTACGGAAGACACGGATAGCCTTTGGCAAGGGCCCACTGGTTTTATT 840

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14690

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Db 14871 GTCGTGCAGGCAGTTACGGAACACGGATAGCCTTTGGCAGGGGCCCATCGGTTTTATC 14930	RESULT 7 AF065891 LOCUS AF065891 LOCUS BETINITION Relistonia eutropha JMP134 phenol hydroxylase gene cluster, complete ACCESSION AF065891 VERSION AF065891.1 GI:3172505 SOURCE Ralstonia eutropha ORGANISM Ralstonia eutropha Bacteria, Forteobacteria, Betaproteobacteria, Burkholderiales; Burkholderiaceae, Ralstonia,	REFERENCE 1 (bases 1 to 8620) AUTHORS Ayoubi,P.J. and Harker,A.R. TITLE Mhole-cell kinetics of trichloroethylene degradation by phenol hydroxylase in a ralsconia eutropha JMR134 derivative hydroxylase in a ralsconia eutropha JMR134 derivative JMRDLINE Appl. Environ. Microbiol. 64 (11), 4353-4356 (1998) MDDLINE Appl. Environ. Microbiol. 64 (11), 4353-4356 (1998) RDLINE PUBMED 9797289 REFERENCE 2 (bases 1 to 8620) ATHORS Harker,A.R. and Ayoubi,P.J. TITLE Direct Submission JOURNAL Submitted (15-MAY-1998) Microbiology, Brigham Young University, FEATURES Location/Qualifiers	source 18620 /organism="Ralstonia eutropha" /organism="JMP134" /db_xref="taxon:510" /db_xref="taxon:510" /db_rome="I" /repeat_region 1830 /note="Similar to TbuT, XylR, and DmpR binding sites" /repeat_region 4961 /repeat_region 70 .00 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 100 // 1	trimental sigma-54 promoter region" hydroxylase component"	/db_xref="GI:3172506" /translation="MALLERRAWYDIARTTNWTPTYVAESDLFPEVMAGAQGVPMEIW FIYDEPYKTSYPEYVRIQREKDAGAYSVKAALERSRMFEDADFGWLSILKAHYGAIAL GEYAANGABAARARFGRAPGRRIMMIFGWLDGBRRHGOLOFYFPHYCPKDRQPVMAHK AXHTNQWGAIAARSPPORRNMINTFGMLDBNRHGOLOFYFPHYCGLGLAADAABAGDF TFASLISSIQTDESRHAQIGGPALQILIANGRKEQAQQLVDVAIARAWRLFSLLTGTS

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J. Ferment. Bioeng. 82, 421-425 (1996)
2 (bases 1 to 5337)
Kitayama, A., Kawakami, Y. and Nagamune, T.
Gene organization and low regiospecificity in aromatic-ring hydroxylati on of a benzene monooxygenase of Pseudomonas aeruginosa
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benzene monooxygenase oxygenase subunit; benzene monooxygenase
ferredoxin; bmoA; bmoB; bmoC; bmoD1.
Pseudomonas aeruginosa
Pseudomonas aeruginosa
Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
                                                           TGTCCGTGCGATTACGCACTGATGGGCCAGCAATTTCCTCCCCGGCCAGTTCTGCCTAG
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KNAPTDATVLFLEGBSGVGKEVPNNLHRLSKRADGFYVANNOAS IPPEHLMREBLFGYB
RGGFTGATTSRAGRFERADGGTLFLDDVGTLSFTAGGKLLRALQGGEIENVGDTRTRK
VNVRVVAATNVNLREAVKAGHFREDLFFRLNVFPIQVPPLRERRERDDLFHLFSGE
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complement (6890. .8309)
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.larity 49.7%; Pred. No. 3.8e-24;
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/codon start=1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 238 GCGCTCTCAGACCTGCGGATCAAAGTCGCAGGACAAGTACGTCCCAACGATTCCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4578 TICCGGTTCGTCGGTGATGGCCCTGCCGAGTTCCTGCCCGGGCAGTACGCGCTGAT---G
                                                         crerregrerectrecenargeraricegarinecenaceagederecaregedager
                                                                                                                      4343 TGCGGAAGTTGCCGCTTCGAGTTGTTGGAGGGGGAAGTCGATGTGTTGTG--CCGCAGCC
                                                                                                                                                                                                                                                                                                                                    178 CCAGGACTITCTTCGCGAGATCGTGAGAAGGGCAACCGCCATCTTGCATGCCAGTGCGTT
                                                                                                                                                                                                                                                                                                                                                                                                             4401 CCCGGCCTTACCGACCGTGACGGACG---GCAACCGCTATCTAGCCTGTCAGTGTGTC
                                                                                                                                                                                              TGGGGAGTATGCAAATTCGAGTTACTCGAAGGGAATGTCCAATGTGGCCGGATGCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Process for producing m-hydroxyphenylacetic acid. B32813. GI:18622943. TP 200006974-A/I. unidentified unidentified unidentified unidentified unidentified unidentified unidentified unidentified.
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AUTHORS
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1894. .1888
1894. .1888
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Direct Submission
Submitted (14-JAN-1996) Atsushi Kitayama, The University of Tokyo,
Department of Chemistry and Biorechnology; 7-3-1 Hongo, Bunkyo-ku,
Tokyo 113, Japan (E-mail:kitayama@tansei.cc.u-tokyo.ac.jp,
Tel:81-3-3812-2111, Pax:81-3-5684-8402)
Location/Qualifiers
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Matches 325; Conserva
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                                                             Z (bases 1 to 4729)

Kahng, H. Y. and Kukor, J. J.

Direct Submission

Submitted (27-Jun-2000) Biotech Center, Rutgers University, Dudley Road, Cook College, New Brunswick, NJ 08901, USA

Location/Qualifiers

| 1 4729 |
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gene="tbc2D"
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gene="tbc2B"
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gene="tbc2C"
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gene="tbc2B"
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Burkholderia cepacia JS150 tbc2 gene cluster, complete sequence.
AF282898
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Burkholderia cepacia
Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
Burkholderiaceae; Burkholderia; Burkholderia cepacia complex.

[bases 1 to 4729]
Kahng, H.Y., Malinverni, J.C., Majko, M.M. and Kukor, J.J.
Cenetic and functional analysis of the tbc operons for catabolism of alkyl- and chloroaromatic compounds in Burkholderia sp. strain
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                                                                                                                                                                                                             tch al Similarity 52.8%; Pred. No. 1.8e-20; 325; Conservative 0; Mismatches 283; Indels
Location/Qualifiers
1. 5337
Corganism=unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
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Byrne, A.M. and Olsen, R.H.
Byrne, A.M. and Olsen, R.H.
Cascade regulation of the toluene-3-monooxygenase operon
(tbublUBVA2C) of Burkholderia pickettii PKO1: Role of the tbubl
promoter (Ptbubl) in the expression of its cognate activator, TbuT
J. Bacteriol 178 (21) (1996) In press
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Location/Qualifiers
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1317 ACCIGCGCGACGACAACGCGCGCGACATCGTGTGCATCGCTGGCGGGCTCCGGACTGGCTC
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                                                                      TTTTCGAAAATAGAAAAGAAGGCGCTCGTCTATTTTTGACGGGACCAATGGGCACATCTT
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Pseudomonas pickettii PKO1 toluene-3-monooxygenase oxygenase subunit (tbuA1) and (tbuA2) genes, (tbuU) gene, (tbuU) gene, tcluene-3-monooxygenase ferredoxin protein (tbuV) gene, and toluene-3-monooxygenase ferredoxin protein (tbuV) gene, and toluene-3-monooxygenase oxidoreductase (tbuC) gene, complete
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Bacteria; Proteobacteria; Betaproteobacteria; Burkhc
Burkholderiaceae, Ralstonia.

1 (bases 1 to 4993)
Byrne, A.M., Kukor, J.J. and Olsen, R.H.
Sequence analysis of the gene cluster encoding
toluene-3-monooxygenase from Pseudomonas pickettii 1
95172404
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/organism="Ralstonia pickettii"
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compounds"
                                                                                                                                                                                     function="catabolism of alkyl- and chloroaromatic
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Pred. No. 2.9e-18;
0; Mismatches 470; Indels 2
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                                                                                                                                        gene="tbc2E"
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OKLAYVRIDTDGELILRRATLEEALGRPFKMSELEVNLSSFAGRIETTDDYVRFYYEK
                                                                                                                                                                     8. .62
note="putative TbuT-binding site"
'mol_type="genomic DNA"
'strain="PKO1"
                                                                                                          db_xref="taxon:329"
                                                                                                                                                                                                                                                                                                             / Tpt_type=inverted
193. _207
193. _207
215. _207
243. _256
280. _284
293. _1798
/gene="tbuk1"
/gene="tbuk1"
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codon start=1
trans table=11
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1823. .2083
/gene="tbuU"
1823. .2083
/gene="tbuU"
/codon_start=1
/trans1_table=11
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2773. .3762
/gene="tbuA2"
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2446. .2760
/gene="tbuV"
2446. .2760
/gene="tbuV"
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AB024945 27-DEC-2000 Alcaligenes faecalis phenanthrene degradative gene cluster (phnAb to phnE genes), complete cds.
AB024945.1 GI:4586270
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                                                                                                                                                                                                                                                                   219
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Alcaligenes faecalis
Alcaligenes faecalis
Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
Alcaligenaceae; Alcaligenes.
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                                                               Alcaligenes
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2 (bases 1 to 24448)
Takizawa,N., Tabata,Y., Fujimoto,T. and Kiyohara,H.
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                                                                                               ACCTGCGCGACGACACGCGCGACATCGTGTGCATCGCTGGCGGCTCCGGACTGGGTC 4478
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                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAAGCTTGAGGTCGTCCAGGCAGTTA------CGGAAGACACGGATAGCCTTTGGC 820
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CIZNIS/09, C10032/00, C12N9/02, C12N9/90// (C12N15/09, C12R1:01),
C12N15/00, C12R1:01)
(C12N15/00, C12R1:01)
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Burkholderia sp.

Burkholderia sp.

Burkholderia sp.

Bacteria, Proteobacteria, Betaproteobacteria, Burkholderiales,

Burkholderiaceae, Burkholderia.

1 (bases 1 to 5743)

Kato, A. and Yanase, E.

Gene encoding desulfurase

Patent: JP 200024947-A 1 12-SEP-2000,

PETROLEUM ENERGY CENTER
                                   TCTTCCGTCCAGGGACCGGACCGAAAGAGTCTTTGCATTGGCGGCGGTGCCGGGCTCTCGT
                                                                                                                                                                                                                               TCTACGGCTCAAGAACTCCGCGCGCGCCTGTTCGGTGGATCGATATCGACATCGATGAGG
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(2499)..(3329)
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(4777)..(5271)
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12-SEP-2000
04-MAR-1999 JP 1999057446
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Location/Qualifiers
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E39081.1 GI:18628914
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AUTHORS
TITLE
JOURNAL
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FEATURES

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Direct Submission
Submitted (14-MAR-1999) Noboru Takizawa, Okayama University of Science, Applied Chemistry; 1-1, Ridai-cho, Okayama 700-0005, Japan (E-mail:takn@biceng.dac.ous.ac.jp, Tel:81-86-256-9552, Location/Qualifiers
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639

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DMRDLGQTLDKYVHKHGIDIAVQLGVHSNDGALSFYAANPSGMLWBEPGNSGGCOGCG rorrecacreareaakeechacreceeeeecheaaeecreeecheechreearricechar 2199 GAATGTCAATCCGGATCGTGCAGCAGTTGCCGCTTTCAGTTGCTGGAGGGCGATGTCAAG 2259 2260 GATTIGIGGICGAAIGCGCCGGGTTIGAAIGCCGAAGCTCGTGAAIGCGGCA---IGCAC 2316 circiocridicidade caractar de contra contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de TATIGICCCGCAGTGGATTCCGACGCGTCAGCATGCGGCGTTGGTCGATGTCGTGCCACTG 2436 2437 ACGCAAGACATGTTCGAGTTTCGTACGGAGGCTTCCAGCTGAGTTTTTGCCTGGC 2496 ? 2497 cadrargoscriecri---roscrnocoroscorosrosas caradoscoracidar de 2553 8554 AACCTGCCCAATGGCATTGGCGAATGGCATTTCATCGTCAAACGCAAACCGGGTGGTTGT 2613 GGAACCGCGCGCTGCTCCATGCTGCTGAGCCGAGGTGATGCTATTGAGTTGGAGGGTCCT 2673 160 TCAATGTGGCCGGATGCTCCAGGACTTTCTTCGCGAGATCGTGAGAAGGGCAACCGCCAT 219 340 ACTCATGACCTGCTGCTGCGATTACGCACTGATGGGCCAGCAAATTTCCTCCCCGGC 399 GAGTGTGCATCGGGAGGTTGCGAGTATGCAAATTCGAGTTACTCGAAGGGAATGTCCAA 159 CTIGCAIGCCAGIGCGITGCGCICTCAGACCIGCGGAICAAAGICGCAGIGCAGGACAAG 279 CAGITCTGCCTAGIAGAGGCAGAGCAGITGCCAGGCGTGGTTCGCGCCAIAITCAAIGGCG 459 520 TITAGICCTIGGCITTICGAAAAAAAAAAAAAGGCGCTCGTCTATTITGACGGGACCA 579 TGCGGCTCAGGGAAGAGCCTGTTGGTCTCAGCACTTGCTAATGGTATCGGATTTCCGTAC 99 AATTTAAAGAACCCCGAAGGCATATGGGAGTTCTATATTAAGAGGGTACCCACAGGACGA TACGTCCCAACGATTCCAATCTCAAGAATGGAAGCGGAAGTTGTTGAGGTCCGGGCGCTA Gaps 10.6%; Score 104.6; DB 1; Length 24448; llarity 49.5%; Pred. No. 4.9e-17; Conservative 0; Mismatches 329; Indels 6; 1 Similarity 328; Conserv Query Match Best Local Si Matches 328; 2377 2140 100 2200 2317 40 220 280 400 460 gene ò 엄 δ dd ò g & 40 40 40 40 9 9 δ 유 δ Q

AF157565
Sphingopyxis macrogoltabida ring hydroxylating dioxygenase beta subbunit (thnA2), ring hydroxylating dioxygenase alpha subunit (thnA1), 2.4-dihydroxydec-2-ene-1,10-dioic acid aldolase (thnB), 2-oxodec-4-ene-1,10-dioic acid hydratase (thnB), 4-(2-oxocylohexyl)-2-hydroxy-buta-2,4-dienoic acid hydrolase (thnB), cis-dihydroxylohexyl) acid hydrogenase (thnB), cis-dihydroxynaphthalene dioxygenase (thnB), ferredoxin (thnA3), and ferredoxin reductase (thnA4) genes, Sphingopyxis macrogoltabida
Sphingopyxis macrogoltabida
Bacteria, Proteobacteria, Alphaproteobacteria, Sphingomonadales,
Banteria, Proteobacteria, Alphaproteobacteria, Sphingomonadaceae,
Sphingomonadaceae, Sphingopyxis.

1 (bases 1 to 8154)
Andujar, E., Hernac, M.J., Kaschabek, S.R., Reineke, W. and Santero, E.
Andujar, E., Hernac, M.J., Kaschabek, S.R., Reineke, W. and Santero, E.
Andujar, E., Hernac, M.J., Kaschabek, S.R., Reineke, W. and Santero, E.
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An 4 (bases 1 to 8154)
Moreno-Ruiz,E., Hernaez,M.J., Martinez-Perez,O. and Santero,E.
Identification and Functional Characterization of Sphingomonas
macrogolitabida Strain TFA Genes Involved in the First Two Steps of
the Tetralin Catabolic Pathway
J. Bacteriol. 185 (6), 2026-2030 (2003) 12618469 5 (bases 1 to 8154) 5 Hernaez, M.J., Floriano, B. and Santero, E. Sequence of thmE and thmD encoding for a hydratase and an aldolase involved in terralin biodegradation Unpublished Sevilla, Ap. 1095, (bases 1 to 8154)

Hernaez, M.J., Floriano, B., Rios, J.J. and Santero, E.

Identification of a Hydratase and a Class II Aldolase Involved in

Biodegradation of the Organic Solvent Tetralin

Appl. Environ. Microbiol. 68 (10), 4841-4846 (2002) Identification of a serine hydrolase which cleaves the alicyclic 2 (bases 1 to 8154) Hernaez, M.J., Andujar, E., Rios, J.L., Kaschabek, S.R., Reineke, W. 6 (bases 1 to 8154)
Andujar,E., Hernaez,M.J. and Santero,E.
Direct Submission
Submitted (09-UNN-1999) Genetica, Universidad de Sevilla 41080, Spain
7 (bases 1 to 8154) ring of tetralin J. Bacteriol. 182 (19), 5448-5453 (2000) complete cds. AF157565 AF204963 AF498315 AF157565.2 GI:23330200 Santero, E. 10633115 22505664 10986248

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Hernaez, M.J., Andujar, E. and Santero, E.

Direct Submission
Submitted (15-NOV-1999) Genetica, Universidad de Sevilla, Ap. 1095,
Sevilla 41080, Spain
Sequence update by submitter
8 (bases 1 to 8154)
Hernaez, M.J., Floriano, B. and Santero, E.
Direct Submission
Submitted (01-APR-2002) Departamento de Ciencias Ambientales,
Only Submitted (01-APR-2002) Departamento de Ciencias Ambientales,
Only Submitted (19-APR-2002) Departamento de Ciencias Ambientales,
Only Submitted (19-APR-2002) Departamento de Ciencias Ambientales,
Only Submitted (19-APR-2002) Departamento de Ciencias Ambientales,
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence update by submitter (bases 1 to 8154)

Moreno-Ruiz, E., Hernaez, M.J., Martinez-Perez, O. and Santero, E. Direct Submission
Submitted (05-JUN-2002) Departamento de Ciencias Ambientales, Universidad Pablo de Olavide, ctra. Utrera Km 1, Sevilla 41013,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence update by submitter
On or before Sep 26, 2002 this sequence version replaced
gi:10567586, gi:5817851.
Location/Qualifiers
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    AUTHORS
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COMMENT
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Dp $\overset{\circ}{\circ}$ q ò d

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Heita 3-75-1, Kamaishi, Iwate 026-0001, Japan
(E-mail:yuki.kasai@mbio.jp, Tel:81-193-26-6544, Fax:81-193-26-6592)
Location/Qualifiers
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                                                                            FEATURES
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Cycloclasticus sp. A5 orf1, phnA1b, phnA1, phnA2, phnC, trpB, orf7, phnA4, phnA3 and phnD genes for hypothetical protein, aromatic dioxygenase large subunit, PAH dioxygenase iron sulfer protein extradiol dioxygenase, tryptophan synthase b subunit, hypothetical protein, ferredoxin reductase, ferredoxin and isomerase, complete and partial cds.

ABI02786.1 GI:33456987
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Molecular Characterization and Substrate Preference of a Polycyclic
Aromatic Hydrocarbon Dioxygenase from Cycloclasticus sp. Strain A5
Appl. Environ. Microbiol. 69 (11), 6688-6697 (2003)
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Direct Submission
Submitted (05-FEB-2003) Yuki Kasai, Marine Biotechnology Institute;
                                                                                                                                                                                                                                                                  7212
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                                            AGGGAAGAGCCTGTTGGTCTCAGCACTTGCTAATGGTATCGGATTTCCGTACGAGTGTGC 107
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd. - nucleic search, using sw model nucleic June 27, 2004, 03:11:33 ; Search time 427.15 Seconds (without alignments) 9846.004 Million cell updates/sec

Run on:

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SUMMARIES

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ALIGNMENTS

Location/Qualifiers
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removal of dioxin - converts to a benzoic acid homolog. Oxidase gene derived from a microbe for hetero:poly:cyclic aromatic hydrocarbon

Claim 2; Page 12-13; 15pp; Japanese.

The present sequence encodes an oxidase which is derived from a microbe and converts a heteropolycyclic aromatic hydrocarbon to a benzoic acid homologue. The oxidase is a method for the removal of dioxin in which dibenzo-p-dioxin is converted to a diphenyl ether triol

Sequence 990 BP; 230 A; 248 C; 279 G; 233 T; 0 U; 0 Other;

100.0%; Score 990; DB 2; Length 990; 100.0%; Pred. No. 0; Query Match Best Local Similarity

ID AAA10957 stand	AAA10957;		agricultural Pseudomonas a	PN JP2000069974-A XX PD 07-MAR-2000	01-SEP-1 01-SEP-1		PT Preparation of PT drugs and agri XX PS Claim 3; Page		-hyd ligu pseu of h	CC the production CC as a raw mater XX SQ Sequence 5337	Query Match Best Local Simila Matches 325; Co	Oy 58 CTGTT Db 4283 CTCTT	Qy 118 TGCGG Db 4343 TGCGG	Oy 178 CCAGG	238 44 238 44 558 44 558 44 558 44 558 44 558 44 558 44 558 44 558 458 4	OY 298 ATCTC 4018 CCCCC	358	Db 4578 TTCCG	40400 01V
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4342 acid hydroxylase activity, which is used in the method of n. The invention relates to a method for the preparation of m facetic acid. The method comprises the use of a culture be body or a treated product of a microbe body, derived from aeruginosa. The microbe produces an enzyme with the ability ting the meta site of phenylascetic acid, which gives rise to no f m-hydroxyacetic acid. The microbe produces are now and acid is used erial for drugs and agricultural chemicals caagtricicecrircaactrigringaagagaaarkaargrigrig--cocaacc 4400 decirraceaecereaceaeceaece---ecaaeceerarcraecerereaereaere 4457 AGACCGACCTCCGGATCAAGGTAAGCGCCGCTGAGGAATATCGCCCCAAGGTACAG 4517 GCGTATTTCGTGCCCGGTTTGTCCAGGCGTTACGGGTAACGCATGACATCTTGGAG 4577 derresresresresrescereces streets es de santa de contra de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 1940 de 194 4635 CAACTGCCTGGCGTGGAGGGTTCGCGCGCTTACTCGATGTCCAACACGCCGAACCCTCGG 4694 117 177 237 TCTCAGACCTGCGGATCAAAGTCGCAGTGCAGGACAAGTACGTCCCAACGATTCCA 297 CAAGAATGGAAGCGGAAGTTGTTGAGGTCCGGGCGCTAACTCATGACCTGCTGTCC 357 417 acid hydroxylase; prepare; m-hydroxyphenylacetic acid; drug; chemical; ds. 418 GCAGAGCAGTTGCCAGGCGTGGTTCGCGCATATTCAATGGCGAATTTAAAGAACCCCGAA 477 of m-hydroxyphenylacetic acid - used as a raw material for ricultural chemicals. TGGTCTCAGCACTTGCTAATGGTATCGGATTTCCGTACGAGTGTGCATCGGGAGGT GATTACGCACTGATGGGCCAGCAAATTTCCTCCCCCGGCCAGTTCTGCCTAGTAGAG GACTITCTTCGCGAGATCGTGAGAAGGGCAACCGCCATCTTGCATGCCAGTGCGTT 8; Gaps of enzyme with phenylacetic acid hydroxylase activity. BP; 1135 A; 1512 C; 1672 G; 1018 T; 0 U; 0 Other; 11.8%; Score 117.2; DB 3; Length 5337; arity 52.8%; Pred. No. 1.6e-27; conservative 0; Mismatches 283; Indels 8; 4-6; 6pp; Japanese dard; DNA; 5337 BP. 98JP-00247139. 98JP-00247139. OMO CHEM CO LID (first entry) eruginosa. 450/23. Ä දු දු

RESULT 2

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P-PSDB; AAB29472, AAB29473, AAB29474, AAB29475, AAB29476.
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desulphurase activity (AAB29472-B229476), and to the genes encoding them invention are a ferredoxin reductase subunit of DBT dioxygenase farredoxin reductases subunit of DBT dioxygenase (AAB29472), a dihydrodiol DBT dehydrogenase (AAB29473), Fe-S alpha subunits of DBT dioxygenase (AAB29475) and a cis 3-hydroxythianaphenyl 2-oxo-3- butenoate isomerase (AAB29476). The invention also relates to variants of the desulphurase proteins which retain activity, and to constructs and transformants comprising DNA encoding the desulphurase proteins composing the subhur compounds from fossil fuels. The present sequence represents the Burkholderia sp. C1 desulphurase gene cluster. (Updated on 15-SEP-2003 to standardise OS field)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 5743;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 10.9%; Score 107.8; DB 3; Length Best Local Similarity 49.8%; Pred. No. 2.2e-24; Matches 330; Conservative 0; Mismatches 327; Indels
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us-10-658-691-3.rng

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Example 3; Fig 16B; 70pp; English.
                                                              99US-0136602P.
                                                        26-MAY-2000; 2000WO-US014637
                                                                            Steffan RJ, Mcclay KR;
                                   Pseudomonas mendocina
                                                                      (ENVI-) ENVIROGEN INC
                                                                                   WPI; 2001-049935/06.
                                                                                       P-PSDB; AAB60228
                                          WO200073425-A1.
                                                                                                         monooxygenase
                                                              28-MAY-1999;
   27-MAR-2001
                                                 07-DEC-2000,
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                                                                                                                                                            AAA65347 standard; DNA; 12808
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                                                                                                                                                                                                                              (first entry)
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                 Pseudomonas sp.
                                                                                                                                                                                                                                                                                                                                                                                                                       WO200037480-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-OCT-1998;
                                                                                                                                                                                                                              09-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JUN-2000,
                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                             AAA65347;
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                                                                                                                           RESULT 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a method for the enantio-specific preparation of epoxides using a wild-type or a mutant non-haem diiron-containing monooxygenase, and an alkene substrate. In particular, the non-haem diiron-containing monooxygenase is a toluene monooxygenase. The invention produces a different ratio of [R] and (S) enantioners of an epoxide relative to the wild-type enzyme, and methods of producing such mutant enzymes. The method is used for large scale production of epoxides which are useful in many processes, particularly in synthetic organic chemistry alkenes are passed through a fluid-bed reactor incoulated with bacteria such as Pseudomonas mendocina [R] possessing or transformed with a
                                                                  Moncoxygenase, epoxide preparation, enantio-specific, non-haem ditron-containing moncoxygenase, alkene epoxidation; bioreactor; pharmaceutical production; toluene moncoxygenase; toluene-4-moncoxygenase; T4MO; tmo F; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68 CAGCACTTGCTAATGGTATCGGATTTCCGTACGAGTGTGCATCGGGAGGTTGCGGAGTAT 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             178
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                248 ACCIGCGGAICAAAGICGGCAGIGCAGGACAAGIACGICCCAACGAITCCAAICICAAGAA 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mutated non-haem diiron-containing monooxygenase. The present sequence represents the Pseudomonas mendocina KR1 toluene-4-monooxygenase (T4MO) tmo F subunit gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           128 GCAAATTCGAGTTACTCGAAGGGAATGTCCAATCAATGTGGCCGGATGCTCCAGGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTCGCGAGATCGTGAGAAGGGCAACCGCCATCTTGCATGCCAGTGCGTTGCGCTCTCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          119 CTGCTCTACGTGCTGAATTGGTATTTCCATATGAGTGTAACTCAGGAGGGTGCGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                               Preparation of enantio-specific epoxides useful in synthetic organic chemistry and pharmaceutical reactions, by contacting alkene with an enzyme comprising a native or mutated non-haem diiron-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gabs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 51.0%; Pred. No. 2.5e-10;
Matches 179; Conservative 0; Mismatches 169; Indels 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1180 BP; 300 A; 256 C; 311 G; 313 T; 0 U; 0 Other;
                                 Pseudomonas mendocina KR1 tmo F gene.
(first entry)
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related complex (I) comprising several polypeptides which contain an alpha submit that contains substituted amino acids at specific positions. The polypeptides and host cells are useful for preparing (-)- (15,2R)-cis-napththalene dihydrodlol, (-or +)-cis-biphanyl-3,4- dihydrodlol, (15,2R)-cis-phenanthrene-1,2-dihydrodlol, cis-1,2- dihydroxyindan, 1,2-dihydroxy-1,2,3,4-tetrahydronaphthalene, which involves contacting them with naphthalene, biphenyl, phenanthrene indene, and 1,2-dihydronaphthalene respectively. The polypeptides and the host cells are also useful for preparing 1,2-dihydroxylonanthrene which involves contacting them with phenanthrene. The polypeptides and the host cells are also useful for preparing 1,2-dihydroxphenanthrene or 3,4-dihydronaphthalene, benzocyclohelpt. Cells are also used in bioramediation in which they oxidise an aromatic compound such as indene, 1,2-dihydronaphthalene, benzocyclohelpt.-ene, anthracene, biphenyl, fluorene, dibenzofuran, dibenzothiophene, 9,10-dihydroxy compound. The polypeptides and the host cells are useful for preparing chiral diols for use in the polymer, resin, pharmaceutical or rubber industry. The present sequence encodes a naphthalene dioxygenase (NDD) mutant alpha subunit, given in the exemplification of the present
356 TCTCGACTCGAGTAGTTAGTAAGCGCTTCCTCTGACGAGATGTTTGAGCTGCGACTTG 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel naphthalene dioxygenase mutant having a specific amino acid substitution for preparing chiral diols for use in the polymer, resin, pharmaceutical or rubber industry and for carrying out bioremediation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pseudomonas sp. strain NCIB 9816-4; naphthalene dioxygenase; NDO; inducible multi-component enzyme; alpha subunit; mutant; chiral diol; polymer; resin; pharmaceutical; rubber industry; bioremediation; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NDO related complex alpha subunit nucleotide sequence SEQ ID NO:10.
                                                                                                                                                                    368 GCACTGATGGGCCAGCAAATTTCCTCCCGGCCAGTTCTGCCTAGTAGAGG 418
                                                                                                                                                                                                                                                                             416 AAGCGGAACAGAAAGTGGTGTTTTCACCAGGGCAATATTTTATGGTTGACG 466
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No. 2e-06;
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                                                                           1101 AATCATCAAGGCATGGTTGTCGCCGTCGACTCGCCACTCACGATATTCGCCGCATCCG 1160
                                                                                                                                                         1161 CAİTCGCCTCGCCAAGCCCTTCGAGİTCTCACCCGGACAĞIAC-----GCGATGCTACA 1214
                                                                                                                                                                                                                                       1392 GÓCTCACACCGGACCGGATGCTGTGTGTGGGCGGCGGGACCGGACTCGCACCGGTGCTGTC 1451
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                                                                                                                                                                                                   GCAGTIGCCAGGCGTGGTTCGCGCATATTCAATGGCGAATTTAAAGAACCCCGAAGGCAT 482
                                                                                                                                                                                                                                                                                                                                                                 AGGGACCGGCCGAAAGAGTCTTTGCATTGGCGGCGGTGCCGGGCTCTCGTATGCGGCCGC 662
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
polymer, resin,
bioremediation.
                                                                                                                                                                                                                                                                                 483 ATGGGAGTICTATATAAGAGGGTACCCACAGGACGATTTAGTCCTTGGCTTTTCGAAAA
                                       AAGAATGGAAGCGGAAGTTGTTGAGGTCCGGGCGCTAACTCATGACCTGCTGTGCG
                                                                                                                     ATTACGCACTGATGGGCCAGCAAATTTCCTCCCCGGCCAGTTCTGCCTAGTAGAGGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pseudomonas sp. strain NCIB 9816-4; naphthalene dioxygenase; NDO; inducible multi-component enzyme; alpha subunit; mutant; chiral diol; polymer; resin; pharmaceutical; rubber industry; bioremediation; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NDO related complex alpha subunit nucleotide sequence SEQ ID NO:5,
  Mismatches 179; Indels
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191; Conservative
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P-PSDB; AAB12568.
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(18, XR. -C18-phenathere alloyarcalol, (- or +) -C18-phenyl-15,4-
dhydrodiol, (18, ZR) -c18-phenathere-11,2-
dhydroxyindan, 1,2-dihydroxy-1,2,3,4-tetrahydronaphthalene, which
indene, and 1,2-dihydronaphthalene, biphenyl, phenathrene,
indene, and 1,2-dihydronaphthalene respectively. The polypeptides and the
colls are also useful for preparing 1,2-dihydroxy-1,2-
dihydrophenanthrene or 3,4-dihydroxy-3,4-dihydrophenanthrene which
involves contacting them with phenathrene. The polypeptides and the host
cells are also used in bioremediation in which they oxidise an aromatic
compound such as indene, 1,2-dihydromaphthalene, benzocyclohelpt-1-ene,
anthracene, phenanthrene, dibenzo(1,4)dioxan, acenaphthylene,
naphthalene, biphenyl, fluorene, dibenzofuran, dibenzothiophene, 9,10-
dihydroxy compound. The polypeptides and the host cells are useful for
chiptroxy compound. The polypeptides and the host cells are useful for
preparing chiral diols for use in the polymer, resin, pharmaceutical or
rubber industry. The present sequence encodes a naphthalene dioxygenase
(NDO) mutant alpha subunit, given in the exemplification of the present
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(- or +)-cis-biphenyl-3,4-
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50.1%; Pred. No. 6e-06;
ive 0; Mismatches 180; Indels
2R)-cis-napththalene dihydrodiol,
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Matches 190; Conservative
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The present invention describes a naphthalene dioxygenase (NDO) or NDO related complex (I) comprising several polypeptides which contain an alpha subunit that contains substituted amino acids at specific positions. The polypeptides and host cells are useful for preparing (-)-(15.2R)-cis-napthhalene dihydrodiol, (-or +)-cis-biphenyl-3,4-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxyl-1,2-dihydroxphenanthrene with they oxidise an aromatic compound such as indene, 1,2-dihydroxphenanthrene, biphenyl, fluorene, dibenzofuran, dibenzochiophene, and hydroxyl-1,2-dihydroxphenanthrene a corresponding dihydroxyl-1,2-dihydroxphenanthrene a corresponding dihydroxphenanthrene a corresponding dihydroxyl-1,2-dihydroxphenanthrene a corresponding dihydroxphenanthrene                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ring chiral diols for use in the polymer, resin, pharmaceutical or industry. The present sequence encodes a naphthalene dioxygenase mutant alpha subunit, given in the exemplification of the present
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                                                                                                                                                                                                                                                                Resnick
                                                                  99WO-US025079
                                                                                                                              98US-0105575P
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                                                                                                                                                                                                                                                         Gibson D,
                                                                                                                                                                                                                                                                                                                        WPI; 2000-452174/39.
P-PSDB; AAB12570.
                                                               26-OCT-1999;
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29-JUN-2000
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Lee K;

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Sequence 4355 BP; 1065 A; 1143 C; 1171 G; 976 T; 0 U; 0 Other;

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1159 Gradicáccárcaagredeceaércaeararecarcaecraedecaraeceredecraes 1218
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                                                                                         319 GITGITGAGGICCGGGCGCTAACTCATGACCTGCTGTCCGTGCGATTACGCACTGATGGG 378
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                                                                                                                                                                                   CCAGCAAATTTCCTCCCCGGCCAGTTCTGCCTAGTAGAGGCAGAGCAGTTGCCAGGCGTG
                                                                                                                                                                                                                                                                                                                                                                 439 GTTCGCGCATALTCAATGGCGAATTTAAAGAACCCCGAAGGCATATGGGAGTTCTATATT
                                                  ٠<u>.</u>
Query Match
5.0%; Score 49.8; DB 3; Length 4355;
Best Local Similarity 50.1%; Pred. No. 4.5e-05;
Matches 182; Conservative 0; Mismatches 172; Indels 9.
                                              Indels
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Novel naphthalene dioxygenase mutant having a specific amino acid substitution for preparing chiral diols for use in the polymer, resin, pharmaceutical or rubber industry and for carrying out bioremediation.
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                                                                                                                                                                                                                                                                                                                                          NDO related complex alpha subunit nucleotide sequence SEQ ID NO:9.
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                                                                                                                                                         ВÞ.
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                                                                                                                                                      AAA65346 standard; DNA; 14462
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                                                                                                                                                                                                                                                                               (first entry)
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P-PSDB; AAB12572.
1510 CTG 1512
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pseudomonas sp.
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                                                                                                                                                                                                                                                                            09-NOV-2000
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The present invention describes a naphthalene dioxygenase (NDO) or NDO related complex (I) comprising several polypeptides which contain an activate at specific constains substituted amino acids at specific constitution. The polypeptides and host cells are useful for preparing (-)-(18,2R)-cis-napththalene dihydrodiol, (18,2R)-cis-paththalene dihydrodiol, (18,2R)-cis-paththalene Li.2-dihydrodiol, (18,2R)-cis-paththalene, which contacting them with naphthalene, biphenyl, phenanthrene, which involves contacting them with naphthalene, biphenyl, phenanthrene, contacting them with phenanthrene, biphenyl, phenanthrene which host cells are also useful for preparing 1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydroxy-1,2-dihydronaphthalene, benzocyclohelpt-1-ene, compound such as indene, 1,2-dihydronaphthalene, benzocyclohelpt-1-ene, compound such as indene, 1,2-dihydronaphthalene, benzocyclohelpt-1-ene, dihydroanthracene, or 9,10-dihydrophenathrene a corresponding dihydro compound. The polypeptides and the host cells are useful for dihydroxy compound. The polypeptides and the host cells are useful for preparing chiral diols for use in the polymer, resin, pharmaceutical or tubber industry. The present sequence encodes a naphthalene doxygenase (NDO) mutant alpha subunit, given in the exemplification of the present

0; Gaps Sequence 14462 BP; 3426 A; 3749 C; 4018 G; 3269 T; 0 U; 0 Other; Query Match Best Local Similarity 52.0%; Pred. No. 0.0022; Matches 102; Conservative 0; Mismatches 94; Indels 0;

invention

486 GGAGTTCTATATTAAGAGGGTACCCACAGGACGATTTAGTCCTTGGCTTTTCGAAAATAG 545

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CCGGGCGCTAACTCATGACCTGCTGTCCGTGCGATTACGCACTGATGGGCCAGCAAATTT 389
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                                      CCGCGAAGGTACAAGTCAAATTGAGCGGCCACTTGGTACGGCTTATTTACGTCAGAA 4354
                                                                                     1355 ccacaccedarecrerenenedecedrecancedecedaciaecaccedacrerenen 4414
GGAGTTCCACATACGCAAGGTGCCGGGTGGCGCGTAACTGAGTATGTTTTCGAGCACGT 4294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             t o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Identifying at least one gene involved in plant resistance or response pathogenic infection for conferring resistance or tolerance to a plant bacterial, fungal or viral infection by determining or detecting plant gene expression.
                                                                GACCGGCCGAAGAGTCTTTGCATTGGCGGCGGTGCCGGGCTCTCGTATGCGGCCTAT
                      Plant; bacterial infection; fungal infection; viral infection; rice; gene; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goff SA, Hou Y;
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4.3%; Score 43; DB 7; Length 2000;
Best Local Similarity 6.9%; Pred. No. 0.0054;
Matches 49; Conservative 324; Mismatches 334; Indels
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Whitham S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 27; SEQ ID NO 5263; 899pp; English.
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                                                                                                                               TATTCGCGCGCGCTG 4430
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                                                                                                            TGCACGCGCCTCGATG 681
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ADA71938 standard; DNA; 2000
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F, Quan S, Tao
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TICAATGGCGAATITAAAGAACCCCGAAGGCATATGGGAGTTCTATATAAGAGGGTACC
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                                                                                                    CCTCCCCGGCCAGTTCTGCCTAGTAGAGGCAGAGCAGTTGCCAGGCGTGGTTCGCGCATA
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Whitham S, Xie Z,
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Katagiri F, Quan S, Tao Y,
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                                                                                                               involved in plant resistance or response to pathogenic infection. MI comprises identifying a gene whose expression is significantly altered in the incompatible interaction of plant gene expression relative to expression of the gene in an uninfected plant, in a mutant plant that does not express a gene associated with response to pathogenic infection, or in a corresponding incompatible or compatible interaction. (MI) is useful for conferring resistance to resistance or tolerance to a plant to bacterial, fungal or viral infection. The present sequence was used to illustrate the invention.
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                      Identifying at least one gene involved in plant resistance or response pathogenic infection for conferring resistance or tolerance to a plant bacterial, fungal or viral infection by determining or detecting plant
                                                                                                                                                                                                                                                                                                                                                                                                               TTTTCGAAAATAGAAAGAGCGCTCGTCTATTTTTGACGGGACCAATGGGCACATCTT
                                                                                                                                                                                                                                                                                                                                                  GCTCCAGGACTTTCTTCGCGAGATCGTGAGAGGGCAACCGCCATCTTGCATGCCAGTGC
                                                                                                                                                                                                                                                                                                                                                                 a method (M1) for identifying genes
                                                                                                                                                                                                                                  Sequence 2000 BP; 336 A; 265 C; 284 G; 363 T; 0 U; 752 Other;
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                                                                                                                                                                                                                                                       4.1%; Score 40.4; DB 7;
Local Similarity 7.2%; Pred. No. 0.04;
Hes 35; Conservative 238; Mismatches 209;
                                                                             Claim 27; SEQ ID NO 5263; 899pp; English.
                                                                                                     present invention relates to
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(first entry)
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                                                        gene expression.
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843 TCAGGTTGTCGACGCAGCGCTGCTTGAAACCCTACCGGAATACGAAATTTATCTTGCCGG 902
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Structural gene and a regulator gene of phenol hydroxylase of Comamonas testosterroni R5 - used for decomposing phenol.
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P-PSDB; AAW90942, AAW90943, AAW90944, AAW90945, AAW90946, AAW90947
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Local Similarity 52.8%; Pred. No. 0.19
hes 84; Conservative 0; Mismatches
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                                                                                                                  product= "protein 2"
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Drosophila, developmental biology, cell signalling, insecticide, pharmaceutical, gene, ds.
                                                    Drosophila melanogaster.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7303 GTGTCCACATACTGTGCCAAGCTCGGTCTCCATGCCCATCATCGCGCAACTGCCTGTTC 7362
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                                               Drosophila, developmental biology, cell signalling, insecticide, pharmaceutical, gene, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 7785 BP; 2166 A; 2186 C; 2007 G; 1426 T; 0 U; 0 Other;
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                          Drosophila melanogaster genomic polynucleotide SEQ ID NO 4432.
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                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 4432; 21pp + Sequence Listing; English.
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11-JUL-2000; 2000US-00614150.
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                                                                                          Drosophila melanogaster.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 4429; 21pp + Sequence Listing; English.
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23-MAR-2001; 2001WO-US009231.
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11-JUL-2000; 2000US-00614150.
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The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention is useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL16176-ABL30511), proceins (ABBS7277-ABB72072). The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signaling and cell-cell interactions. Claim 1; SEQ ID NO 39965; 21pp + Sequence Listing; English. Myers EW; Li PWD, 23-MAR-2001; 2001WO-US009231 23-MAR-2000; 2000US-0191637P 11-JUL-2000; 2000US-00614150 Drosophila melanogaster Venter JC, Adams M, WPI; 2001-656860/75. P-PSDB; ABB71058. (PEKE) PE CORP NY WO200171042-A2 27-SEP-2001

0; Gaps Query Match 3.8%; Score 37.6; DB 4; Length 680; Best Local Similarity 54.3%; Pred. No. 0.19; Matches 76; Conservative 0; Mismatches 64; Indels Sequence 680 BP; 193 A; 163 C; 164 G; 160 T; 0 U; 0 Other;

299 GATCTCCGAGTCGATGATGATTCGCTTCAGTTCTTCCATCACGACTGGTGGACGAAGGC 240 751 GATATCGACATCGATGAGGACAAGCTTGAGGTCGTCCAGGCAGTTACGGAAGACACACGGAT 810 811 AGCCTTTGGCAAGGGCCCACTGGTTTTATTCATCAGGTTGTCGACGCAGCGCTGCTTGAA 870 239 CTCCTTGCGGATCATGGTGCGTTCTTGTAGTTGGAGTTGTTGGCGTACCGCAGCTTGCC 180 871 ACCCTACCGGAATACGAAAT 890 179 ArcceccedaAcrceAAcr 160 a ò Q 임 ઠ

ABL15160 standard; cDNA; 2738 BP BX BX SX K K K BX BX BX SX SX B C I

26-MAR-2002 (first entry)

Drosophila melanogaster expressed polynucleotide SEQ ID NO 39962.

Drosophila; developmental biology; cell signalling; insecticide; pharmaceutical; gene; ss.

Drosophila melanogaster.

WO200171042-A2

27-SEP-2001

23-MAR-2001; 2001WO-US009231

23-MAR-2000; 2000US-0191637P. 11-JUL-2000; 2000US-00614150.

(PEKE) PE CORP NY

Myers EW PWD, ij Venter JC, Adams M,

WPI; 2001-656860/75. P-PSDB; ABB71057.

New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signaling and cell-cell interactions.

Claim 1; SEQ ID NO 39962; 21pp + Sequence Listing; English.

18 The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in alucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL16176) and the encoded proteins (ABBS7737-ABR27072). The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 2738 BP; 738 A; 643 C; 659 G; 698 T; 0 U; 0 Other;

Gaps ;0 3.8%; Score 37.6; DB 4; Length 2738; 54.3%; Pred. No. 0.41; ive 0; Mismatches 64; Indels 0 Query Match 3.8 Best Local Similarity 54.3 Matches 76; Conservative

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Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Bukaryota; Butheria; Primates; Catarrhini; Hominidae; Homo.

I (Bases I to 1201)

I (Jases I to 1201)

I Unpublished (2001)

Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BP 191 91006 EVRY cedex - France
Invitrogen. Contact: Feng Liang Email: seqref@genoscope.cns.fr
Invitrogen. Contact: Feng Liang Email: fliang@lifetech.com (RL: Intp://fullnegth.invitrogen.com/ Invitrogen.com/ Envision 1600

Faraday Avenue Genoscope sequence ID: CSODIO72CCO3NF1.

Location/Qualifiers

Location/Qualifiers

Location/Qualifiers
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BX381961 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA clone CSODIO72YF05 3-PRIME, mRNA sequence.

BX381961. GI:30453007
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       CCC47819
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 Homo sapiens (human)
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SOURCE
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AUTHORS
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      GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Listing first 45 summaries
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                                   nucleic search, using sw model
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14: gb_estp::*
15: em_estpun::*
16: em_estpun::*
17: em_gss_hum::*
18: em_gss_hum::*
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Anote="Organ: embryo; Vector: pFlc1; Site_1: XhoI; Site_2: BamHI; Library was Kindly generated by Piero Carninci at the RIKEN. The library was normalized and excised using Cre recombinase. Plasmid cDNA library.
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BJ260819 Y. Ogihara unpublished cDNA library, Wh_h Triticum aestivum cDNA clone whh27all 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             751 GATATCGACATCGATGAGGACAAGCTTGAGGTCGTCCAGGCAGTTACGGAAGACACGGAT 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta, Spermatophyta; Magnoliophyta; Liliopsida, Poales, Poaceae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Triticae, Chapter, Y. and Murai, K. Expressed genes in Triticam aestivum Unpublished (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 811 AGCCTTTGGCAAGGGCCCACTGGTTTTATTCATCAGGTTGTCGACGCAGCGCTGCTTGAA 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260 CTCCTTACGGATCATGGTGTCGTTCTTGTAGTTGGAGTTGTTGGCGTACCGCAGCTTGCC 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /sex="male and female"
/dev stage="0-24 hours mixed stage embryonic"
/lab_host="DH5-alpha TonA"
/clone lib="RE Drosophila melanogaster normalized Embryo
pFlc-1"
        Ephydroidea, Drosophilidae, Drosophila.

[Dases 1 to 600)

Stapleton, M., Brokstein, P., Hong, L., Tyler, D., Berman, B.,

Carlson, J., Champe, M., Chavez, C., Dorsett, V., Farfan, D., Frise, E.,

George, K., Gonzalez, M., Gduzin, H., Harris, N., Li, P., Liaco, G.,

Misra, S., Mungall, C.J., Nunco, J., Pacleb, J., Paragas, V., Park, S.,

Phouanenavong, S., Wan, K., Yu, C., Lewis, S.E., Celniker, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320 GATCTCCGAGTCGATGATGGTTCGCTTCAGTTCTTCCATCACGGCATGGTGGACAAAGGC
                                                                                                                                                                                                                                                                                                          Lawrence Berkeley National Lab
One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: http://www.fruitfly.org/EST, est@fruitfly.berkeley.edu
htt genomic AE003453: arm:2R [16010240,16312786]
estimated-cyto:57B20-57D11: 04/12/2001
Plate: RE.759 row: A column: 2
Plate: RE.759 row: A column: 2
High quality sequence stop: 223.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 600;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Drosophila melanogaster"
/mol_type="mRNA"
/db_xref="taxon:7227"
/clone="RE27902"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 12;
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Center For Genetic Resource Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 40.8; DE 55.7%; Pred. No. 1.6; ative 0; Mismatches
                                                                                                                                                                                        Rubin, G.M.
BDGP/HHMI RE Drosophila EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Triticum aestivum (bread wheat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BJ260819.1 GI:20082659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   871 ACCCTACCGGAATACGAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200 ATCCGGCCGGAACTCGAACT
                                                                                                                                                                                                                                         Unpublished (2001)
Contact: Stapleton, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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Best Local Simi
Matches 78;
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BJ260819/c
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TITLE
JOURNAL
                                   REFERENCE
AUTHORS
                                                                                                                                                                                                              TITLE
JOURNAL
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BE27902.Sprime RE Drosophila melanogaster normalized Embryo pFlc-1
Drosophila melanogaster CDNA clone RE27902 5 similar to mago:
FBan0009401 located on: 2R 57C2-57C2;: 04/12/2001, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1010 PMMMMCAMKVMMMBAMMMMBAMVVMMMMMMMCKKOVVKKKKKOKKKKBMSKKMMNK 1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        170 NINIKANINININININININIKKOMKASKCKKKKKKOMCCKKKKKKKMBKGRAVVCMCKAMKKCM 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           890 NYPPAMEKKONCPAMKKONCCPAMKKKKTKANTAKKYAPAMCKKKBMMCKKONTOPANTYKKKKKANAPANB 949
                                                                                                                                                                                                                                                                                                                                                                                         GGAAGTTGTTGAGGTCCGGGCGCTAACTCATGACCTGCTGTCCGTGCGATTACGCACTGA 374
                                                                                                                                                                                                                                                                                                                                                                                                                            470 KANPANANACHZARANKAKZANANANAPARAKANANANAKANINKAKCKAARAMANKAAPANKAARAN 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCAGCGCTGCTTGAAACCCTACCGGAATACGAAATTTATCTTGCCGGTCCACCGCCTAT 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         530 NCNKAMMAMNKKAANKAMMAKANMMACKTINNNNNNNNKKNNNNKKNNNNKKKKKKKKKKKKNNNN 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATTAAGAGGGTACCCACAGGACGATTTAGTCCTTGGCTTTTCGAAAATAGAAAGGG 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    710 KKTINKKKKONAKKONTININGMININGININGINGINCNCNKKKONKTIMMINMININKKON 769
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCGAIGCGCGAAACAGACAAGCCGGTAAAGTIGTICTACGGCTCAAGAACTCCGCGCGA 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCTGTTCGGTGGATQGATATCGACATCGATGAGGACAAGCTTGAGGTCGTCCAGGCAGT 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               795 TACGGAAGACACGGATAGCCTTTGGCAAGGCCCACTGGTTTTATTCATCAGGTTGTCGA 854
/mol_type="mRNA"
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/clone_Tib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/clone_Tist strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR v sites of the pCMVSPORT 6 vector. Library was normalized.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGTGGTTCGCGCATATTCAATGGCGAATTTAAAGAACCCCGGAAGGCATATGGGAGTTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGGCCAGCAAATTTCCTCCCCGGCCAGTTCTGCCTAGTAGAGGCAGAGCAGTTGCCAGG
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Drosophila melanogaster
Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygo
Neoptera, Endopterygota, Diptera, Brachycera, Muscomorpha,
                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                          Length 1201;
                                                                                                                                                                                                                                                                                    4.3%; Score 42.8; DB 13;
larity 2.7%; Pred. No. 0.57;
Conservative 225; Mismatches 361;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BI229988.1 GI:14697252
                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 16; Conserv
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KV 1071
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BI229988/c
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Gaps

us-10-658-691-3.rst

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Contact: Robert Strausberg, Ph.D.
Email: cgapbs-romail.nih.gov
cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima
Bonaido, Ph.D.
cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Mashington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /lab host="DH10B"
/clone lib="Scares testis_NHT"
/note="Vector: pT7T3D-Pac (Pharmacia) with a modified
polylinker; Site=1: Not 1; Site=2: Eco RI; 1st strand cDNA
was prepared from mRNA obtained from Clontech
Laboratories, Inc., and primed with a Not I · oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA813209 440 bp mRNA linear EST 13-FEB-1998 aj32e04.s1 Soares_testis_NHT Homo saplens cDNA clone 1392030 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                               856 GCAGCGCTGCTTGAAACCCTACCGGAATACGAATTTATCTTGCCGGTCCACCGCTATG 915
                                                                                                                                                                                                            796 ACGGAAGACACGGATAGCCTTTGGCAAGGGCCCACTGGTTTTATTTCATCAGGTTGTCGAC 855
                                                                                                                                                                                                                                                                                                                                                                                                                                         916 GICGACGCIACIGICCGIAIGCIGCIGCICGCAAGGGIGITCCACGCGAICAAATICATITT 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases i to 440)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
Tumor Ganer Institute, Cancer Genome Anatomy Project (CGAP),
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                             142 GACTACTTTGTTAAAACCTCGTTTGAACCTGTAGTTGATTTTGTGTTTTCCACCTATTGCT 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82 TTTGATTCTCATGATCATCTGAACCTCAAGAAGCATTTCATAAGTCATATCATATCTTTA 23
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       genomic DNA inserted into pHOS1 using BstXI linkers"
                                                                                                                    ö
                                                                      Score 37.8; DB 28; Length 291;
Pred. No. 8.5;
0; Mismatches 127; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Possible reversed clone: polyT not found Seg primer: -40ml3 fwd. ET from Amersham High quality sequence stop: 378.

Location/Qualifiers
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/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="1392030"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA813209.1 GI:2883194
                                                                        Query Match
Best Local Similarity 47.3%;
Matches 114; Conservative
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AUTHORS
TITLE
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COMMENT
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AA813209
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BOHQF45TR BOHQ Brassica oleracea genomic clone BOHQF45, genomic
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Brassica oleracea
Brassica oleracea
Brassica oleracea
Brassica oleracea
Brassica oleracea
Brassica oleracea
Brassica oleracea
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosida; eurosida II; Brassicales; Brassicaceae; Brassica.
Town,C.D., van Aken,S., Utterback,T., Koo,H., and Fraser,C.M.
Whole genome shotgun sequencing of Brassica oleracea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144 CGAAGGGAATGTCCAATGTGGCCCGGATGCTCCAGGACTTTCTTCGCGAGATCGTGA 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              471 ceacerdeaderacaaccaderccarecerceacedececececececedares
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                351 ceracedaadescecercesceaarcerireceaericaaareeaaages 292
                                                                                                                                                      204 GAAGGCCAACCGCCATCTTGCATGCCAGTGCGTTGCGCTCTCAGACCTGCGGATCAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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/d_one="BOHQF45"
/dlone lils="BOHQ"
/note="Vector: pHOS1; Site_1: BstXI; 2-3 kb sheared
                                                                                                                                                                                                                                                                                                                                                                                        Match 3.9%; Score 38.2; DB 12; Length 615; Local Similarity 49.7%; Pred. No. 9.4; Conservative 0; Mismatches 98; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9712 Medical Center Drive, Rockville, MD 20850, USA.
Tal: 301-838-3523
Fax: 301-838-0208
Email: cdcown@t.gr.org
DNA is from a doubled haploid provided by Tom Osborn.
Seg primer: TR
Class: Location/Qualifiers
National Institute of Genetics
1111 Yara, Mishima,
1111 81-879-81-6856
Fax: 81-559-81-6855
Email: tshinin-Genes nig.ac.jp.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. 291 | Corganism="Brassica oleracea" | /mol type="genomic DNA" | /strain="TO1000DH3"
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BH569723
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Best Local S:
Matches 97
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BH569723/c
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and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B1367122 634 bp mRNA linear EST 01-AUG-2001
BESD813:Sprime RE Drosophila melanogaster normalized Embryo pFlc-1
Drosophila melanogaster cDNA clone RE52813 5 similar to mago:
FBAN0009401 located on: 2R 57C2-57C2;: 05/14/2001, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota;
Bukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota;
Neoptera, Endopterygota, Diptera, Brachycera, Muscomorpha,
Ephydroidea, Drosophilidae, Drosophila.
1 (basea I to 634)
1 (basea I to 634)
2 tapleton, M., Brokstein, P., Hong, L., Tyler, D., Berman, B., Faplacon, J., Champe, M., Chavez, C., Dorsett, V., Farfan, D., Frise, E., George, R., Gonzalez, M., Guarin, H., Harris, M., Li, P., Liao, G., Misra, S., Mungall, C.J., Nunco, J., Pardes, J., Paragas, V., Park, S., Phouanenavong, S., Wan, K., Yu, C., Lewis, S.E., Celniker, S. and
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/dev stage="0-24 hours mixed stage embryonic"
/lab_host="DHS-alpha TonA"
/clone lib="RE Drosophila melanogaster normalized Embryo
pFlc-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anote="Organ: embryo; Vector: pFlc1; Site_1: XhoI; Site_5
BamHI; Library was kindly generated by Piero Carninci at
the RIKEN. The library was normalized and excised using
Cre recombinase. Plasmid cDNA library."
                                                                                                                                                                                                                                                                                                  632 GCGGCGCTCCCGGCCTCTCGTAIGCGGCCGCTATTGCACGCGCCCTCGATGCGCGCGAAACAG
                                                                                                                                                                                                                                                                                                                                                             261 deadacdededederetrecatededadeerarrerdededededadadare
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One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: http://www.fruitfly.org/SST, est@fruitfly.berkeley.edu
hit genomic AE003453: arm:2R [16010240,16312786]
estimated-cyto:57B20-57D11: 05/14/2001
Plate: RE.528 row: B column: 1
High quality sequence stop: 500.
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1. .634
/organism="Drosophila melanogaster"
                                                                                                                                                                         28;
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                                                                                                                                                                  Score 37.8; DB
Pred. No. 12;
0; Mismatches
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Unpublished (2001)
Contact: Stapleton, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.8%; Score 37.8;
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/db_xref="taxon:7227"
/clone="RE52813"
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                                                                                                                                                                     3.8%;
llarity 57.0%;
Conservative
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Best Local Similarity
Matches 69; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rubin, G.M.
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/organism="Zea mays"
/organism="Zea mays"
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Contact: Walbot V.
Department of Biological Sciences
Stanford University Palo Alto, CA 94304, USA
Stanford University Palo Alto, CA 94304, USA
Fax: 650 723 2227
Fax: 650 725 8221
Email: walbot@stennford.edu
Plate: 3591 1 98 1 row: 5
Class: transposon-tagged.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84 TATCGGATTTCCGTACGAGTGTGCGCAGGTTGCGGAGGTATGCAAATTCGAGTTACT 143
Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not and Eco RI sites of the modified pTT3 vector. Library went through one round of normalization to Cots, and was constructed by Bento Soares and M. Fatima Bonaldo."
                                                                                                                                                                                                                                                                                                                                                                                                                       184 TĠATCAĠCAAĠŤŦĊACCTGCŤŦGĠŦĊĆŦCAŤĠGCĊĊŦĠĠCĊAGGĊŤĠĊĠĠĠAĠGCĊĠGCG 243
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Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, Liliopsida, Poales, Poaceae, PACCAD

Clade, Panicoideae, Andropogoneae, Zea.

Walbot,V.
                                                                                                                                                                                                                                                                                                                                                                    83
                                                                                                                                                                                                                                                                                                                                                         24 GCAAGCGCCAGGGACCTGCGGCTCAGGGAAGAGCCTGTTGGTCTCAGCACTTGCTAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    144 CGAAGGAATGTCCAATCAATGTGGCCGGATGCTCCAGGACTTTCTTCGCGAGATCGTGA
                                                                                                                                                                                                                                                                                                  Gaps
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- RescueMu Grid P Zea mays genomic,
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0
                                                                                                                                                                                                                             Score 37.8; DB 9; Length 440;
Pred. No. 10;
0; Mismatches 119; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    244 GGTGGAGGCGGGATAATGCCAGGGACGGGGTTGAGCGCGCAGACC 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3591 1 98 1 B10.x 1 3591
genomic survey sequence.
CC047819
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GSS.
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Best Local Similarity 47.6%;
Matches 108; Conservative
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CC047819
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BI167687.1 GI:14633494
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                198 TCGGCAACGGCCGGGTCCAACTGGTCGACGCAGAGCAGTTGCGGGGCGTTGGCGGCGGAC 139
                                                          722 GAACTCCGCGCGACGCTGTTCGGTGGATCGATATCGACATCGATGAGGACAAGCTTGAGG 781
                                                                                                                                                                          293 TCTTCCATCACGGACTGGTGGACGAAGGCCTCCTTGCGGATCATGGTGTCGTTCTTGTAG 234
                                                                                              353 GACGTCCAGGGGGAGATCGTCCTGCATGATCTCCGAGTCGATGATGATTCGCTTCAGT 294
                                                                                                                                    TCGTCCAGGCAGTTACGGAAGACACGGATAGCCTTTGGCAAGGGCCCACTGGTTTTATTC 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales; Pseudomonadaceae; Pseudomonas.

1 (bases 1 to 1176)
Spencer, D.H., Raymond, C.K., Smith, E.E., Sims, E.E., Hastings, M., Burns, J.L., Kaul, R. and Olsen, M.V.
Whole-Genome-Sequence variation among multiple isolates of Psedomonas aeruginosa library J. Bacteriol. (2002) In press
                                                                                                                                                                                                                                                                                                               0; Gaps
                        Gaps
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farian="reseucomonas aeruginosa"
/mol type="genomic DNA"
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/clone="pacs1-60"
/clone=lib="pacs1-60"
/clone=lib="pacs1-60"
/lone="clinical isolate 1-60 Whole genomic shotgun library."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.8%; Score 37.8; DB 28; Length 1176; Best Local Similarity 58.4%; Pred. No. 17; Matches 66; Conservative 0; Mismatches 47; Indels 0;
                                                                                                                                                                                                              842 ATCAGGTTGTCGACGCAGCGCTGCTTGAAACCCTACCGGAATACGAAAT 890
                                                                                                                                                                                                                                                  233 Tragadricindecenacedeaecriecearecedecedaaereaaer 185
                        82; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    University of Washington
Box 352145, Seattle, WA 98105-2145,
Tel: 2062216954
Fax: 206687244
Email: craymond@u.washington.edu
  Best Local Similarity 51.5%; Pred. No. 13;
Matches 87; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pseudomonas aeruginosa
Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Class: shotgun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genome Center
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                                                                                                                                    782
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BI167687/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                         RESULT 8
BZ551949/c
                                                                                                                                                                                                                                                                                                                                                               DEFINITION
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COMMENT
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AUTHORS
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KEYWORDS
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HTC 04-NOV-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              810
Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Bukaryota, Metazoa, Arthropoda; Hexapoda; Insecta; Pterygota;
Bukaryota, Metazoa, Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera, Endopterygota, Diptera; Brachycera; Muscomorpha;
Bphydroidea; Drosophilidae; Drosophila.

1 (basea I to 36)
1 (basea I to 36)
2 tapleton, M., Brokstein, P., Hong, L., Tyler, D., Berman, B.,
Carlson, J., Champe, M., Chavez, C., Dorsett, V., Farfan, D., Frise, E.,
Misra, S., Mungall, C. J., Munco, J., Parleb, J., Paragas, V., Park, S.,
Phouanemavong, S., Wan, K., Yu, C., Lewis, S.E., Celniker, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /dev stage="0-24 hours mixed stage embryonic"
/dev stage="0-24 hours mixed stage embryonic"
/lab_host="DHS-alpha TonA"
/clone lib="RE Drosophila melanogaster normalized Embryo
pFlc-1"
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One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Email: http://www.fruitily.org/EST, est@fruitfly.berkeley.edu
hit genomic AE003453: arm:2R [16010240,16312786]
estimated-cyto:57820-5771: 04/11/2001
Plate: RE. Bl row: B column: 11
High quality sequence stop: 315.
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Drosophila yakuba
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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3.8%; Score 37.6; DB 12; Length 369;
Best Local Similarity 54.3%; Pred. No. 11;
Matches 76; Conservative 0; Mismatches 64; Indels 0;
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|organism="Drosophila melanogaster"
|/mol_trype="mRNA"
|db_xref="taxon:7227"
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BDGP/HHMI RE Drosophila EST Project
Unpublished (2001)
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151

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Andrews, J., Bouffard, G. and Oliver, B.

Andrews, J., Bouffard, G. and Oliver, B.

Drosophila melanogaster testis expressed sequence tags

Unpublished (1999)

Contact: Brian Oliver

Laboratory of Cellular and Developmental Biology

NIDDK, National Institutes of Health

Center Drive MSC 2715, Bidg 6, Rm Bi-13, Bethesda, MD 20892 USA

Fax: (301) 496 5239

Email: Oliver/Phelix.nih.gov,

http://www.niddk.nih.gov/intram/people/boliver.htm

Tissue isolation and library construction performed at the National Institute of Diabetes and Digestive and Kidney Diseases, NIH (see http://www.niddk.nih.gov/intram/people/boliver.htm). DNA sequencing and analyses performed by National Institutes of Health Intramural Sequencing Center (NISC); see http://www.nisc.nih.gov).

Seq primer: M13RP1 reverse primer (ABI).
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Jab host="Solk (Stratagene)"
/clone lib="Drosophila melanogaster adult testis library"
/clone lib="Drosophila melanogaster adult testis library"
/note="Organ: testis; Vector: pBlueScript SK (Stratagene);
Site l: SocR I; Site 2: Xho I; Testes dissected from 1-5
day adult y[*] ww[67c1]/Y males raised at 25oC. RNA
isolated using Trizol [Life Technologies) and a single
       <1. .>441
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/db_xref="G1:38048483"
/db_xref="G1:38048483"
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TMIRKEAFYHQSVWBELKRIIIDSEIMQEDDLPWPPPDFRUGGETISFTT
SKTGSLVDVNRSKDPEGLRCFYYLVQDLKCLVFSLIGLHFKIKPI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear EST 04-OCT-2000
testis library Drosophila
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATCTCCGAATCGATGATCGCTTTTAGCTCCTCCATCACGGACTGGACGAAGGC
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                                                                                                                                                                                                                                                                                                                                                   Length 441;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  517 bp mRNA linear bs79204.y1 Drosophila melanogaster adult testis limelanogaster cDNA clone bs79204 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                             64;
                                                                                                                                                                                                                                                                                                                                                   DB 11;
                                                                                                                                                                                                                                                                                                                                                3.8%; Score 37.6; D
54.3%; Pred. No. 12;
cive 0; Mismatches
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/strain="y[*] w[67c1]/Y"
/db_xref="taxon:7227"
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Best Local Similarity 54.3
Matches 76, Conservative
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KEYWORDS
SOURCE
ORGANISM
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BE978534/c
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AUTHORS
TITLE
JOURNAL
COMMENT
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          CDS
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TMIRKEAFVHGSVMEELKRIIIDSEIMQEDDLPWPPPDRVGRQELEIVIGDEHISFTT
SKTGSLVDVNRSKDPBGLRCFYYLVQDLKCLVFSLIGLHFKIKPI"
                                                                                                                                                                                           Domazet-Loso, T. and Tautz, D.
Domazet-Loso, T. and Tautz, D.
Direct Submission
Submitted (07-FB-2003) Evolution Genetics, Institute for Genetics,
Weyertal 121, Cologne 50931, Germany
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HTC 04-NOV-2003
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Submitted (07-FEB-2003) Evolution Genetics, Institute for Genetics,
Weyertal 121, Cologne 5031, Germany
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               210 GATCTCCGAATCGATGATGATCCGCTTTAGCTCCTCCATCACGGACTGGTGGACGAAGGC 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                811 AGCCTTTGGCAAGGGCCCACTGGTTTTATTCATCAGGTTGTCGACGCAGCGCTGCTTGAA 870
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Drosophila yakuba
Bukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
Bukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
Boptera, Endopterygota, Diptera, Brachycera, Muscomorpha,
Ephydroidea, Drosophilidae, Drosophila.

1 (bases 1 to 441)
Domazet-Loso, T. and Tautz, D.
An evolutionary analysis of orphan genes in Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /-. .>441
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1 (bases 1 to 441)
Domazet-Loso,T. and Tautz,D.
An evolutionary analysis of orphan genes in Drosophila
Genome Res. 13 (10), 2213-2219 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 11; Length 441;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AY232121: 441 bp mRNA linear Drosophila yakuba clone yak-ad_mago mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Drosophila yakuba"
/mol_type="mRNA"
/db_xref="taxon:7245"
/cione="yak-em_mago"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 3.8%; Score 37.6; DB Best Local Similarity 54.3%; Pred. No. 12; Matches 76; Conservative 0; Mismatches
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Domazet-Loso, T. and Tautz, D.
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AY232121.1 GI:38048482
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Score 37.6; DB
Pred. No. 13;
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Unpublished (2001)
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dev_stage="0-24 hours mix
lab_host="DH5-alpha TonA"
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BI483125.1 GI:15318139
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                                                                                                               3.8%;
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Best Local Similarity
Matches 76; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BIL67742

SAI bp mRNA linear EST 09-JUL-2001

SE08194.5prime RE Drosophila melanogaster normalized Embryo pFlc-1

Brosophila melanogaster CDNA clone RE08134 5 similar to mago:

EBAND009401 located on: 2R 57C2-57C2;: 04/11/2001, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Bukatora; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endoperygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.

Ephydroidea; Drosophilidae; Drosophila.

Stapleton, M., Brokstein, P., Hong, L., Tyler, D., Berman, B.,
Stapleton, M., Champe, M., Chavez, C., Dorsett, V., Farfan, D., Frise, E.,
Garlson, J., Champe, M., Guarin, H., Harris, N., Li, P., Liao, G.,
Misra, S., Mungall, C.G., Nunoo, J., Pacleb, J., Paragas, V., Park, S.,
Phouanenavong, S., Wan, K., Yu, C., Lewis, S.E., Celniker, S. and
                                                                                                                                                                                                                                                                                                                                                         GATATCGACATCGATGAGGACAAGCTTGAGGTCGTCCAGGCAGTTACGGAAGACACGGAT 810
                                                                                                                                                                                                                                                                                                                                                                                                               245
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round of Poly(A)+ selection using Oligotex (Qiagen). cDN library constructed using Stratagene ZAP-cDNA syntesis kit. Oligo dTrprimed, size fractionated ~1-6 kb, and directionally cloned at EcoRI and XhoI in Uni-ZAP XR. Following a single round of amplification pBlueScript SK phagemids were mass excised. A distribution channel for clones is being sought, but not currently available. Requests for clones cannot be honored."
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One Cyclotron Rd, Berkeley, CA 94720, USA
Fax: $10 486 6798
Email: http://www.fruitfly.org/EST, est@fruitfly.berkeley.edu
hit genomic AE003453: arm:2R [16010240,16312786]
estimated-cyto:57B20-57D11: 04/11/2001
Plate: RE.81 row: H column: 10
High quality sequence stop: 425.
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0
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/lab_host="DH5-alpha TonA"
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3.8%; Score 37.6; D
Best Local Similarity 54.3%; Pred. No. 13;
Matches 76; Conservative 0; Mismatches
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/db_xref="taxon:7227"
/clone="RE08194"
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BI167742/c
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BI483125
RE65966.5prime RE Drosophila melanogaster normalized Embryo pFlc-1
Drosophila melanogaster cDNA clone RE65966 5 similar to mago:
FBan0009401 GO:[polarisation of the cocyte microtubule cytoskeleton (GO:0008103); oskar mRNA localization regulation (GO:0007317)]
located on: 2R 57C2-57C2;: 05/16/2001, mRNA sequence.
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                      "note="Organ: embryo; Vector: pFlc1; Site_1: XhoI; Site_2:
amHI; Library was kindly generated by Piero (Arninci at
the RTEN. The Library was normalized and excised using
tre recombinase. Plasmid cDNA library."
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Buboptera; Brdopterrygta; Diptera; Brachycera; Muscomorpha;

Ephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 557)

Stapleton, M., Brokstein, P., Hong, L., Tyler, D., Berman, B.,

Carlson, J., Champe, M., Chavez, C., Dorsett, V., Farfan, D., Frise, E.,

George, R., Gonzalez, M., Guarin, H., Harris, N., Li, P., Liao, G.,

Misra, S., Mungall, C.J., Nunco, J., Pacleb, J., Paragas, V., Park, S.,

Phouanenavong, S., Wan, K., Yu, C., Lewis, S.E., Celniker, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          811 AGCCTTTGGCAAGGGCCCACTGGTTTTATTCATCAGGTTGTCGACGCAGGGCTGCTTGAA 870
the RIKEN. The library was normalized and excised using Cre recombinase. Plasmid cDNA library."
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One Cyclotron Rd, Berkeley, CA 94720, USA
Eax: 510 486 6798
Email: http://www.fruitfly.org/EST, est@fruitfly.berkeley.edu
hit genomic AE003455: arm:2R [16010240,16312786]
estimated-cyto:57B20-57D11: 05/16/2001
Plate: RE. 659 row: P column: 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64;
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BII67128
RE07446. Sprime RE Drosophila melanogaster normalized Embryo pFlc-1
Drosophila melanogaster cDNA clone RE07446 5 similar to mago:
FBan0009401 located on: 2R 57C2-57C2;: 04/11/2001, mRNA sequence.
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                                                                                                              751 GATATCGACATCGATGACGACAAGCTTGAGGTCGTCCAGGCAGTTACGGAAGACACGGAT 810
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Drosophila melanogaster
Bukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
Neoptera, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
Neoptera, Endoperygota, Diptera, Brachycera, Muscomorpha,
Ephydroides, Drosophilidae, Drosophila.
(bases I to 606)
Stapleron, M., Brokstein, P., Hong, L., Tyler, D., Berman, B.,
Carlson, J., Champe, M., Chavez, C., Dorsett, V., Farfan, D., Frise, E.,
George, M., Gonzalez, M., Guarin, H., Harris, M., Li, P., Liao, G.,
Misra, S., Mungall, C.J., Nunco, J., Parale, J., Paragas, V., Park, S.,
Phousnenavong, S., Wan, K., Yu, C., Lewis, S.E., Celniker, S. and
                                                                                                                                                                  320 GAİCTCGGAĞİCĞATĞATGĞİTCĞĞİTCAĞTTĞATÇĞATCACĞGAÇTGĞAĞĞĞAĞĞAAĞĞÇ 261
                                                                                                                                                                                                                         811 AGCCTTTGGCAAGGGCCCACTGGTTTATTCATCAGGTTGTCCACGCAGGGCTGCTTGAA 870
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/lab_host="DH5-alpha TonA"
/clone_lib="RE_Drosophila melanogaster normalized Embryo
PFlo-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lawrence Berkeley National Lab
One Cyclouron Rd, Berkeley, CA 94720, USA
Fax: 510 486 6798
Fax: 510 486 6798
Fax: 510 486 6798
Fax: 510 486 6798
Fax: 510 480 57820-57011: 04/11/2001
Fatinated cyto:57820-57011: 04/11/2001
Flate: RE.74 row: D. column: 10
Flate: RE.74 row: D. column: 10
High quality sequence stop: 504.
Location/Qualifiers
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3.8%; Score 37.6; DB 12; Length 606;
Best Local Similarity 54.3%; Pred. No. 14;
Matches 76; Conservative 0; Mismatches 64; Indels 0;
Query Match
3.8%; Score 37.6; DB 12; Length 557;
Best Local Similarity 54.3%; Pred. No. 13;
Matches 76; Conservative 0; Mismatches 64; Indels 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BDGP/HHMI RE Drosophila EST Froject Unpublished (2001)
Contact: Stapleton, M.
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                                                                                                                                                                                                                                                                                                                                          871 ACCCTACCGGAATACGAAAT 890
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VERSION
KEYWORDS
SOURCE
ORGANISM
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BI167128/c
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DEFINITION
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AUTHORS
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JOURNAL
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GATATCGACATGAGGACAAGGTTGAGGTCGTCCAGGCAGTTACGGAAGACACGGAT 810

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811 AGCCTTTGGCAAGGGCCCACTGGTTTTATTCATCAGGTTGTCGACGCAGCGCTGCTTGAA 870
302 GATCTCCGAGTCGATGATGATTCGCTTCAGTTCTTCCATCACGGACTGGTGGACGAAGGC 243
                                                                                         242 CTCCTTGCGGATCATGGTGGTCGTTGTAGTTGGAGTTGTTGGCGTACCGCAGCTTGCC 183
                                                                                                                                      871 ACCCTACCGGAATACGAAAT 890
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Search completed: June 27, 2004, 09:59:09 Job time : 2847.31 secs

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US-08-688-609-7/c
; Sequence 7, Application US/08688609
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990
1 atgtaccaactcaaaattga.....attttgacgcatttttctaa 990
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GenCore version 5.1.6
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Maximum Match 100%
Listing first 45 summaries
                                                    nucleic search, using sw model
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4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 1801 4 US. 3.2 18	S S WE 444444444444444444444444444444444	1.4 3.2 1044 4 US-09-252-991A-15076 Sequence 15076, 1.4 3.2 1227 4 US-09-489-039A-1021 Sequence 11821, 1.4 3.2 1227 4 US-09-489-039A-1021 Sequence 11821, 1.4 3.2 1559 2 US-09-489-039A-1021 Sequence 11821, 1.4 3.2 1559 2 US-09-489-039A-1021 Sequence 11821, 1.4 3.2 1559 2 US-09-489-039A-1021 Sequence 11821, 1.2 3.2 392 3 US-09-252-991A-1057 Sequence 118551, 1.2 3.2 392 4 US-09-252-991A-10411 Sequence 118551, 1.2 3.2 1110 4 US-09-252-991A-10411 Sequence 118551, 1.2 3.2 1110 4 US-09-252-991A-10411 Sequence 118551, 1.2 3.2 1110 4 US-09-252-991A-1041 Sequence 118551, 1.2 3.2 1191 3 US-08-831-876-1 Sequence 118551, 1.2 3.2 1191 3 US-08-831-876-1 Sequence 118551, 1.2 3.2 1191 3 US-08-831-876-1 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 1191 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 11831 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 11831 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 11831 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 11831 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 11831 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 11831 4 US-09-252-991A-376 Sequence 118551, 1.2 3.2 11831 4 US-09-252-991A-376 Sequence 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ZIP: 02109-1875

COMPUTER REDABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/002,832
FILING DATE:
FILING DATE:
APPLICATION NUMBER: 35,430
FILING DATE:
ATCRNEY/AGENT INFORMATION:
NAME: ATTOM BCR: 35,430
REFRENCE/DOCKET NUMBER: 35,430
REFRENCE/DOCKET NUMBER: MIQ-004
TELECOMMUNICATION INFORMATION:
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                                       GENERAL INFORMATION:
APPLICANT: Falb, Dean A.
APPLICANT: Glameno, Carlos J.
TITLE OF INVENTION: and Diagnostic Uses Therefor
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street
CITY: Boston
STATE: Massachusetts
COMPUTRY: USA
ZIP: OCHONTRY: USA
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3.8%; Score 37.6; DB 1; Length 444;
Best Local Similarity 54.3%; Pred. No. 0.0095;
Matches 76; Conservative 0; Mismatches 64; Indels (
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RESULT 4

US-08-499-215-1

US-08-499-215-1

US-08-499-215-1

Squence 1, Application US/08499215

Patent No. 5612204

GENERAL INFORMATION:

APPLICANT: Sacki, Hisashi

APPLICANT: Miura, Akira

TITLE OF INVENTION: TREATMENT OF CHLORINE-SUBSTITUTED ETHYLENE

TITLE OF INVENTION: TREATMENT OF CHLORINE-SUBSTITUTED ETHYLENE

NUMBER OF SEQUENCES: 5

CORESPONDENCE ADDRESS:

ADDRESSER: Sughtue, Mion, Zinn, Macpeak & Seas

STREET: 2100 Pennsylvania Avenue

CITY: N.W.

STATE: Washington D.C.

COUNTRY: U.S.A.

ZIP: 2003-1-320

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

SOFTWARE: & WacdPerfect version 5.1

CURRENT APPLICATION NUMBER: US/08/499,215

PRIOR APPLICATION: 435

PRIOR APPLICATION DATA:
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751 GATATCGACATCGATGAGGACAAGCTTGAGGTCGTCCAGGCAGTTACGGAAGACACGGAT 810

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150 CTCCTTGCGGATCATGGTGTCGTTCTTGTAGTTGGAGTTGTTGGCGGTACCGCAGCTTGCC 91

RESULT 3
US-09-002-812-7/c
US-09-002-812-7/c
Sequence 7, Application US/09002832
Patent No. 6031076
GENERAL INFORMATION:
APPLICANT: Gimeno, Carlos J.
TITLE OF INVENTION:
CORRESPONDENCE 3.14
CORRESPONDENCE 3.14
CORRESPONDENCE ADDRESS:
ADDRESSES: LAHIVE & COCKFIELD
STREET: 60 State Street
CITY: Boston
STATE: Massachusetts
COUNTRY: USA

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4211 GGCGGAGGCGCGGCGAGATCGAGCTGAACGTGCGGCAGGTGCCGGGCGGCCT 4270
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
3.6%; Score 35.8; DB 4; Length 53:
Best Local Similarity 43.4%; Pred. No. 0.2;
Matches 279; Conservative 0; Mismatches 352; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1391 CTCGGGGCTGTCGAGCCCGCGCTCCATGATCTGCGACCTGCTG 4433
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                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: CDS
LOCATION: (3345)..(3701)
OTHER INFORMATION: tomO
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: CDS
LOCATION: (3741)..(4799)
OTHER INFORMATION: tomP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (4801)..(5136)
; OTHER INFORMATION: tomQ
US-09-453-956-1
                                                                                         NAME/KEY: CDS
LOCATION: (1474)..(1743)
OTHER INFORMATION: tomM
FEATURE:
                                                                                                                                                                                                                  NAME/KEY: CDS
LOCATION: (1781)..(3328)
OTHER INFORMATION: tomn
LOCATION: (446)..(1441)
OTHER INFORMATION: tomL
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Sequence 885, Application US/09252991A
Sequence 885, Application US/09252991A
Sequence 885, Application US/09252991A
Sequence 885, Application US/09252991A
PAREMATION: Water of Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: Marc J. Rubenfield et al.
APPLICANT: MARC J. Rubenfield et al.
APPLICANT: MAC J. Rubenfield et al.
APPLICANTON: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: ARGUINOSA FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR PILING DATE: 1998-07-27
SEQ ID NOS: 33142
SEQ ID NOS: 33142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253 Accerchecceesacaaeaaearinchachachechreescheceeseeseeseaacees 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     688 ACAGACACACCGGTAAAGTTGTTCTACGGCTCAAGAACTCCGCGCGACGCTGTTCGGTGG 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313 cresserresrearcaceacacacacacresacriceceadocados 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/08257999;
Patent No. 5530195
GENERAL INFORMATION
GENERAL INFORMATION:
TITLE OF INVENTION: No. 5530195el Bacillus Thuringiensis Gene
TITLE OF INVENTION: Encoding a Toxin Active Against Insects
NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
ADDRESSEE: Ciba-Geigy Corporation
STREET: 7 Skyline Drive
STREET: NY
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     748 ATCGATATCGACATCGATGAGGACAAGCTTGAGGTCGTCCAGGCAGTTACGGAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 34; DB 4; Length 2097; Pred. No. 0.46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 10532
COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/257,999
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
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ATTORNEY/ACENT INFORMATION:
NAME: Elmer, James Solits
REGISTRATION NUMBER: 36,129
TELEPHONE: 919-541-8614
TELEPHONE: 919-541-8689
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 4003 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Pseudomonas aeruginosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 56.1<sup>3</sup>
Matches 64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-252-991A-885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-257-999-1/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 2097
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Sequence 863. Application US/09252991A
Patent No. 6551795
Patent No. 6551705
Patent No. 6551705
Patent No. 6551705
Patent No. 6551705
Patent No. 6551705
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Patent No. 6551705
Patent No. 6551705
Patent No. 6551705
Patent No. 6551705
Patent No. 6551705
Patent No. 6
                                              Sequence 3, Application US/09784316

Patent No. 6461843

GENERAL INFORMATION:
TITLE OF INVENTION: ISOLATED HUMAN ENZYME PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN ENZYME PROTEINS, AND USES
TITLE OF INVENTION: THREND FOR THE REPRENCE: CLOOI139
CURRENT APPLICATION NUMBER: US/09/784,316
CURRENT APPLICATION NUMBER: US/09/784,316
CURRENT FILING DATE: 2001-02-16
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 65042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6894 TTTTGAATAAGAAAAGGAGAGAGTCAACAGTAGAAGACTAGACCTCTGGGCAATACAAT 6953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      534 TTTCGAAAATAGAAAAGAAGGCGCTCGTCTATTTTTGACGGGACCAATGGGCACATCTTT 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        116 Accerchecedesacadecadricraeracreerresecrecedeseceseses
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    176 chcdecrhcardahadhachcadchadhadhracacadadadadhada 229
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.5%; Score 34.8; DE
Best Local Similarity 62.8%; Pred. No. 2.2;
Matches 54; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6954 circadacraaddaccadcrdraada 6979
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
LCCATION: (1)...(65642)
CTHER INFORMATION: n = A,T,C or G
US-09-784-316-3
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, ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 56.18
Matches 64; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    심
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PatentIn Release #1.0, Version #1.25
                                                                                                   FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/167,457
FILING DATE: 15-DEC-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/694,718
FILING DATE: US 07/694,718
FILING DATE: US 07/694,718
FILING DATE: US 07/694,718
APPLICATION NUMBER: US 07/694,718
TALESCHANTION 10-2-MAY-1991
CLASSIFICATION: 435
ATTORNEY/AGENT INPORMATION:
NAME: WAILELY NUMBER: UWP-2
TELEFRANCE/DOCKET NUMBER: UWP-2
TELEFRONCE, 904-375-800
INPORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 9785 base pairs
WATE: WAILELY SAME TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE TO THE T
                                                                          US/08/319,387
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         667 GCACGCCTCGATGC 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)
US-08-319-387-1
                                       CURRENT APPLICATION DATA APPLICATION NUMBER: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic acid
EDNESS: single
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i_LOCATION: 16
CTHER_INFORMATION: n=a,
US-09-621-976-18033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic strandEdNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  922 GCTACTGTCCGTATGCTCGTCGCAAGGGTGTTCCACGCGATCAATTCATTTTGACGCA 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  862 CIGCITGAAACCCTACCGGAATACGAAATTTATCTTGCCGGTCCACCGCCTATGGTCGAC 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _note= "This region of the CryIE(c) DNA sequence encodes the amino acid sequence designated Sub-Sequence B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
LOCATION: 1191..1590
CTHER INFORMATION: //note= "This region of the CryIE(c)
OTHER INFORMATION: DNA sequence encodes the amino acid sequence
OTHER INFORMATION: designated Sub-Sequence A"
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/08319387

Sequence 1, Application US/08319387

Sequence 1, Application US/08319387

Sequence 1, Application US/08319387

Sequence 1, Application US/08319387

GENERAL INFORMATION:

APPLICANT: Stancesconi, Stephen C.

TITLE OF INVENTION: Microbial Degradation of Trichloroethylene, TITLE OF INVENTION: Dichloroethylenes and Aromatic Pollutants

NUMBER OF SEQUENCES: 7

CORRESPONDENCE ADDRESS:

ADDRESSEE: Saliwanchik & Saliwanchik

STREET: 2421 N.W. 41st Street, Suite A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
3.4%; Score 33.4; DB 1; Length 4003;
Best Local Similarity 54.5%; Pred. No. 1.1;
Matches 67; Conservative 0; Mismatches 56; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /product= "Full-length CryIE(c)
                                                                                                                                                                                                                                                                                                      /function= "putative promoter
region"
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Bacillus thuringiensis
STRAIN: kurstaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 32606
COMPUTER READSHLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
NAME/KEY: CDS
LOCATION: 196..3723
OTHER INFORMATION: /product-
OTHER INFORMATION: protein"
                                                                                                                                                        INDIVIDUAL ISOLATE: CGB316 FEATURE:
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CTHER INFORMATION: /nc
OTHER INFORMATION: DWA
OTHER INFORMATION: DWA
OTHER INFORMATION: det
                                                                                                                                                                                                                                   NAME/KEY: promoter LOCATION: 96..124 OTHER INFORMATION: /
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185..190
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NAME/KEY: I
LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          607 ACCGGCCGAAAGAGTCTTTGCATTGGCGGCGGTGCCGGGCTCTCGTATGCGGCCGCTATT
                                                                                                                                                                                                                                                                                                                          Gaps
               DB 1; Length 9785;
Query Match
3.3%; Score 32.8; DB 1; Length 9
Best Local Similarity 48.0%; Pred. No. 3.2;
Matches 94; Conservative 0; Mismatches 102; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
US-09-621-976-18033
; Sequence 18033, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; TILLE OF INVENTION: ESTS and Encoded Human Proteins.
; TILLE REFERENCE: GENSET.054PR2; CURRENT FILING DATE: 2000-07-21
; CURRENT FILING DATE: 2000-07-21
; SOFTWARE: PATENT PROFEST OF SEQ ID NOS: 19335
; SOFTWARE: PATENT PRINT APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; SOFTWARE: PATENT PRINT APPLICATION NUMBER: US/09/621,976
; SOFTWARE: PATENT PRINT APPLICATION NUMBER: US/09/621,976
; DENGRAPE: PATENT PRINT APPLICATION NUMBER: US/09/621,976
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; DENGRAPE APPLICATION NUMBER: US/09/621,976
; DENGRAPE APPLICATION NUMBER: US/09/621,976
; DENGRAPICATION NUMBER: US/09/621,976
; DENGRAPICATION NUMBER: US/09/621
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2128 AAACCTAAAAACCTTTTTCCATGGCCATTCCTATACAGGCAATCAGCTTGGCTGTGCGT 2187
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2068 GCCAATTGCCGTTAGCGTTTGCCACTGAAGACATCTATAAGGCATTCTATGATGATTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     801 AGACACGGATAGCCTTTGGCAAGGGCCCACTGGTTTTATTCATCAGGTTGTCGACGCAGC
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                                                       COMPUTER: 0.5.A.A.
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5. Diskette, 1.44 Mb
COMPUTER: 18M PS/2 Model 50Z or 553X
COMPUTER: 18M PS/2 Model 50Z or 553X
COMPUTER: 18M PS/2 Model 50Z or 553X
COMPUTER: 18M PS/2 Model 50Z or 553X
COMPUTER: 18M PS/2 Model 50.0)
SOFTWARE: 18M PS/2 Model 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/676,818
FILING DATE: 08-UJL-1996
CLASSIFICATION NUMBER: 08/239,430
FILING DATE: UND SATA:
APPLICATION NUMBER: 08/239,430
FILING DATE: UND SATA:
NAME: Freeman, John W.
REFERENCE/DOCKET NUMBER: 04598/004001
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 1, Application US/09407549; Patent No. 6303377; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 200154
INPORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 8478
TYPF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 46.95
Matches 100; Conservative
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STRANDEDNESS: double
      Boston
Massachusetts
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US-08-676-818-1
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US-09-407-549-1
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                                                                                                          276 CAAGTACGTCCCAACGATTCCAATCTCAAGAATGGAAGCGGAAGTTGTTGAGGTCCGGGC 335
                                                                                                                                                                 336 GCTAACTCATGACCTGCTGTGCGATTACGCACTGATGGGCCAGCAAATTTCCTCCC 395
                                                                                                                                                                                                                                                 396 CGGCCAGTTCTGCCTAGTAGAGGCAGAGCAGTTGCCAGGCGTGGTTCGCGCATATTCAAT 455
                                                                                                                                                                                                                                                                              456 GGCGAATTTAAAGAACCCCGAAGGCATATGGGAGTTCTATATTAAGAGGGTACCCACAGG 515
                                                                                                                                                                                                                                                                                                                                                              312 RMCCYYMRKTTYCMMMYSRWRGSMWTARGAWMMCYWWYYWAARKKKKYMWWAAAARGG 371
                                                                                                                                                                                            192 SYWMMMRRAAAAKTXYYCMMSKTMCCMACCCMMCCMRRARSCCMRSCMRSYTYMMCYYY 251
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      Length 474;
Query Match
3.3%; Score 32.6; DB 4; Length 4
Best Local Similarity 12.0%; Pred. No. 0.54;
Matches 29; Conservative 109; Mismatches 103; Indels
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Patent No. 6057136
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Bower, Stanley Grant
APPLICANT: Perkins, John B.
APPLICANT: Perc, Janice G.
TITLE OF INVENTION: BIOTIN BIOSYNTHESIS IN BACILLUS
TITLE OF INVENTION: SUBTILIS
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1095 ccgcccccrcrcccccccaAcacccccrrcrc 1063
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ) ORGANISM: Klebsiella pneumoniae
US-09-489-039A-6774
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LENGTH: 3972
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225 Franklin Street

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APPLICANT: Bower, Stanley Grant
APPLICANT: Berkins, John B.
APPLICANT: Perkins, John B.
APPLICANT: Youm, R. Rogers
APPLICANT: Pero, Janice G.
TITLE OF INVENTION: BIOTIN BIOSYNTHESIS IN BACILLUS
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street Boston

Fish & Richardson P.C.

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Won Jun 28 UV:30:30 2004
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18-TC-P2G-OT-B1

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CTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at various positions throughout the sequence
CTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2
                                                                                                                Query Match
3.3%; Score 32.2; DB 3; Length 4
Best Local Similarity 47.3%; Pred. No. 1.1e+02;
Matches 97; Conservative 0; Mismatches 108; Indels
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                 COMPUTER REALDALE FORM:
MEDIUM TYPE: 0.3.1" Diskette, 1.44 Mb
MEDIUM TYPE: 13.5" Diskette, 1.44 Mb
COMBUTER: TBM F8/2 Model 502 or 555X
OCHUTER: TBM F8/2 Model 502 or 555X
OCHUTER: WordPerfect (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
CLASSIFTCATION NUMBER: US/09/407,549
FILING DATE: May 6,1994
APPLICATION NUMBER: 08/239,430
FILING DATE: May 6,1994
APPLICATION NUMBER: 08/084,709
FILING DATE: JUNE 25, 1993
ATORNEY AGENT INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                    NAME: Freeman, John W.
REGISTRATION NUMBER: 99,066
REFERENCE/DOCKET NUMBER: 04599/004001
TELECOMMUNICATION INFORMATION:
TELEFHONE: (617) 542-5070
TELEFA: 200154
INFORMATION FOR SEQ ID NO: 1:
ERGURATION FOR SEQ ID NO: 1:
LENGTH: 8478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
US-09-407-549-1
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d à g

Query Match
3.3%; Score 32.2; DB 4; Length 8478;
Best Local Similarity 46.9%; Pred. No. 4.8;
Matches 100; Conservative 0; Mismatches 113; Indels 0

2128 AAACCTAAAAACCTTTTTCCATGGCATTCCTATACAGGCAATCAGCTTGGCTGTGGCGT 2187

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RESULT 15 US-09-103-840A-2

Sequence 2, Application US/09103840A

Sequence 2, Application US/09103840A

Patent No. 629432B

GENERAL INFORMATION.

APPLICANT: FLEISCHMAN, Robert D.

APPLICANT: FLEISCHMAN, Robert D.

APPLICANT: FLEISCHMAN, Robert D.

APPLICANT: FLEISCHMAN, Robert D.

APPLICANT: FLEISCHMAN, Robert D.

APPLICANT: FLEISCHMAN, Robert D.

TITLE OF INVENTION: TUBERCULOSIS

FILE REPERENCE: 24566-20007.00

CURRENT APPLICATION NUMBER: US/09/103,840A

CURRENT FILING DATE: 1998-06-24

NUMBER OF SEQ ID NOS: 2

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 2

LENGTH: 4403765

TYPE: DNA ORGANISM: Mycobacterium tuberculosis

801 AGACACGGATAGCCTTTGGCAAGGGCCCACTGGTTTTATTCATCAGGTTGTCGACGCAGC 860

1825965 GAATCGTTGTCGACGGCGATGTGGCGCGTGAAGTCGTCCACCGGGGCCACCGAGGGGC 1826024 1826025 resecrescresceles recentes recentes reconstructes resecres resecres resecres resecres resecres resecres resecres resecres researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches researches re 1826085 GGCAGGCGTTGGCGGCCAAGGCGTTTCGAGATGACGAGTCGCGCGGTGTGCTCAACGGAA 1826144 746 GGATCGATATCGACATCGATGAGGACAAGCTTGAGGTCGTCCAGGCAGTTACGGAAGACA 866 TIGAAACCCIACCGGAAIACGAAAITTAICTIGCCGGICCACCGCCTAIGGICGACGCIA 806 CGGATAGCCTTTGGCAAGGGCCCACTGGTTTTATTCATCAGGTTGTCGACGCAGCGCTGC 1826145 redrecacederidericecedes 1826169 926 CTGTCCGTATGCTCGCCAAGGG 950 Search completed: June 27, 2004, 10:02:59 Job time: 96.4159 secs

Length 4403765

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June 27, 2004, 07:56:42; Search time 456.449 Seconds (without alignments) 9936.011 Million cell updates/sec
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| cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.seq:*
| cgn2_6/ptodata/1/pubpna/DTOTNEW PUB.seq:*
| cgn2_6/ptodata/1/pubpna/USO6_NEW PUB.seq:*
| cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
| cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
| cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.seq:*
| cgn2_6/ptodata/1/pubpna/USO8_NEW PUB.seq:*
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| cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Sequence 10, Applisequence 5, Applisequence 7, Applisequence 13049, A Sequence 13049, A Sequence 13544, A Sequence 20742, A Sequence 20742, A Sequence 3981, Applisequence 3981, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Applisequence 3, Sequence 3 Description 17 US-10-658-691-3 10 US-09-843-256-10 10 US-09-843-256-10 10 US-09-843-256-9 11 US-09-843-256-9 13 US-10-282-122A-13049 15 US-10-282-122A-13049 15 US-10-282-122A-1318-1 15 US-10-223-3718-1 9 US-09-864-761-20742 13 US-10-282-122A-12871 9 US-09-864-761-2871 16 US-10-2864-761-2871 16 US-10-2864-761-3981 16 US-10-256-238-3074 Query Match Length DB 990 1 12808 1 9706 1 4355 1 14462 1 1029 1 1983 1240 65042 Result υυ O

Sequence 11, Appl Sequence 11, Appl Sequence 21, Appl Sequence 21, Appl Sequence 6, Appli Sequence 6, Appli Sequence 25, Appli Sequence 12, Appli	equence 30013 equence 12970 equence 12970 equence 41550 equence 172, equence 104, equence 104,	Sequence 13613, A Sequence 13860, A Sequence 3324, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 354, App Sequence 35	equence 354, equence 354, equence 354, equence 354, equence 354,
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ALIGNMENTS

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        Cargarosta 3, Application US/10658691
Publication No. US20040110258A1
GENERAL INFORMATION:
APPLICANT: Kayest. Kevin J.
APPLICANT: Kibane, John J.
TITLE OF INVENTION: Method for Metabolizing Carbazole in Petroleum FILE REPRENCE: GTI-1512
CURRENT APPLICATION NUMBER: US/10/658,691
CURRENT FILING DATE: 2003-09-09
PRIOR APPLICATION NUMBER: US 60/409,562
PRIOR FILING DATE: 2002-09-10
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin version 3.2
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; ORGANISM: Pseudomonas resinovorans
US-10-658-691-3
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Best Local Similarity 100.0
Matches 990; Conservative
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LENGIH: 990
US-10-658-691-3
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Sequence 5, Application US/09843250

Publication No. US2003002335A1

GENERAL INFORMATION:

APPLICANT: Parales, R.

APPLICANT: Reanick, S.

APPLICANT: Resnick, S.

APPLICANT: Resnick, S.

APPLICANT: Resnick, S.

PRICE REFERENCE: 875.006US2

CURRENT APPLICATION NUMBER: US/09/843,250

CURRENT APPLICATION NUMBER: PCT/US99/25079

PRIOR FILING DATE: 1999-10-26

PRIOR FILING DATE: 1998-10-26

PRIOR FILING DATE: 1998-10-26

NUMBER OF SEQ ID NOS: 65

SOUTHWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 5

LENGTH: 9706
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                                                                                                                                                                                                        A modified DNA molecule encoding valine at the position corresponding to the F352 amino acid in NDO.
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Pred. No. 2e-07;
0; Mismatches 179;
PRIOR FILING DATE: 1998-10-26
NUMBER OF SEQ ID NOS: 65
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 10
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OTHER INFORMATION: A modified D:
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ORGANISM: Artificial Sequence
FEATURE:
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Best Local Similarity 50.4%;
Matches 191; Conservative
                                                                                                                    LENGTH: 12808
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                                                                                                                    CTCTCAGACCTGCGGATCAAAGTCGCAGTGCAGGACAAGTACGTCCCAACGATTCCAATC 300
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                                   GGACTTTCTTCGCGAGATCGTGAGAAGGGCAACCGCCATCTTGCATGCCAGTGCGTTGCG
                                                                                                                                                                                                                                                                                                301 TCAAGAATGGAAGCGGAAGTTGTTGAGGTCCGGGCGCTAACTCATGACCTGCTGTCCGTG
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GGACTITCTTCGCGAGATCGTGAGAAGGGCAACCGCCATCTTGCATGCCAGTGCGTTGCG
                                                                                                                                                                           241 CICICAGACCIGGGAICAAAGICGCAGIGCAGGACAAGIACGIGCCAACGAITCCAAIC
                                                                                                                                                                                                                                         TCAAGAATGGAAGCGGAAGTTGTTGAGGTCCGGGCGCTAACTCATGACCTGCTGTCCGTG
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FUBLICATION NO. US20030022335A1
GENERAL INFORMATION:
APPLICANT: Parales, R.
APPLICANT: Gibson, D.
APPLICANT: Resnick, S.
ITLE OF INVENTION: No. US20030022335A1e1 nag
FILE REPERENCE: 875.006US.
CURRENT APPLICATION NUMBER: US/09/843,250
CURRENT FILING DATE: 2001-04-26
FRIOR APPLICATION NUMBER: US/099/25079
FRIOR PLING DATE: 1999-10-26
FRIOR APPLICATION NUMBER: US 60/105,575
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545
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                                                                                                                                                                                                                                      1330 CGCAAGGTGCCGGGTGGGCGCGTAACGGAGTATGTTTTCGAGCACGTCCGCGAAGGTACA 1389
                                                                                                                                                                                                                                                                                                                                               1390 AGCATCAAGTTGAGCGGGCCACTTGGTACGGCTTATTTGCGTCAGAACCACACACGGGCCG 1449
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                                                                              439 GTTCGCGCATATTCAATGGCGAATTTAAAGAACCCCGAAGGCATATGGGAGTTCTATATT 498
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US-90-643-220-9

Publication No. US203002233541

GENERAL INFORMATION:

APPLICANT: Parales, R.

APPLICANT: Gibson, D.

APPLICANT: Gibson, D.

APPLICANT: Resmirck, S.

APPLICANT: Resmirck, S.

APPLICANT: Resmirck, S.

APPLICANT: Lee, K.

TITLE OF INVENTION: NO. US2033022335A1e1 naphthalene dioxygenase and met FILE REFERENCE: 875.00640.

PRIOR PLICATION NUMBER: US/09/843,250

CURRENT FILING DATE: 2001-04-26

PRIOR PLILING DATE: 1999-10-26

PRIOR PLILING DATE: 1999-10-26

PRIOR PLILING DATE: 1999-10-26

PRIOR PLILING DATE: 1999-10-26

PRIOR PRIOR APPLICATION NUMBER: US 60/105,575

PRIOR PLING DATE: 1999-10-26

NUMBER OF SEQ ID NOS: 65

SOFTWARE: FastSEQ for Windows Version 4.0

SOFTWARE: PRACTICAL Sequence

FEATURE:

CTHER INFORMATION: A modified DNA molecule encoding valine at the OTHER INFORMATION: NOO.

US-09-843-250-9
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                                                                                                                                                                                       559 CGTCTATTTTGACGGGACCAATGGGCACATCTTTCTTCCGTCCAGGGACCGGCCGAAAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.6%; Score 45.6; DB 10; Length 14462; ilarity 52.0%; Pred. No. 0.00034; Conservative 0; Mismatches 94; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1415 TATTCCCGCCCCCTC 4430
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Best Local Similarity
Matches 102; Conserva
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TITLE OF INVENTION: NO. US20030022335Alel naphthalene dioxygenase and methods for the FILE OF INVENTION NUMBER: US/09/843,250
CURRENT APPLICATION NUMBER: US 001-04-26
PRIOR APPLICATION NUMBER: DCT/US99/25079
PRIOR APPLICATION NUMBER: US 60/105,575
PRIOR FILING DATE: 1999-10-26
NUMBER OF SEQ ID NOS: 65
SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1159 GTGGTCGCCGTCGAGTCGCCCACTCACGATATCCGTCGCCTACGCGTACGCCTCGCTAAAG
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                                                                                                                                                                                                                                                                                                                     1253 CGTACGCCTCTCCAAGCCCTTCGAGTTCTCACCCGGACAGTACGCGACACT----GCA
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                                                                                                                                                             303 AAGAATGGAAGCGGAAGTTGTTGAGGTCCGGGCGCTAACTCATGACCTGCTGTCCGTGCG
                                                                                                                                                                                                                                                                   363 ATTACGCACTGATGGGCCAGCAAATTTCCTCCCCGGCCAGTTCTGCCTAGTAGAGGCAGA
                                                                                                                                                                                                                                                                                                                                                                        423 GCAGITGCCAGGCGTGGTTCGCGCATATTCAATGGCGAATTTAAAGAACCCCGAAGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                483 ATGGGAGTICTATATAAGAGGTACCCACAGGACGATTTAGTCCTTGGCTTTTCGAAAA
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CTHER INFORMATION: A modified DNA molecule encoding valine at the OTHER INFORMATION: position corresponding to the F352 amino acid in US-09-843-250-7
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                                                  Length 9706;
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                                                                                                        0; Mismatches 180; Indels
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50.1%; Pred. No. 5.8e-06;
iive 0; Mismatches 172;
                                                                                 6.46-0
                                                        Score 53;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   663 TATTGCACGCGCCTCGATG
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ORGANISM: Artificial Sequence
                                                        5.4%;
                                                     Query Match
Best Local Similarity 50.1<sup>5</sup>
Matches 190; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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Matches 182;
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US-09-843-250-7
     US-09-843-250-5
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APPLICANT: Trawick, John
APPLICANT: Carr, Grant
APPLICANT: Carr, Grant
APPLICANT: Carr, Grant
APPLICANT: Samewock, Robert
APPLICANT: Forsyth, R.
APPLICANT: Forsyth, R.
APPLICANT: Tammenco, Robert
APPLICANT: Xu, H.
APPLICANT: Xu, H.
APPLICANT: Xu, H.
APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-02-20
FRICR APPLICATION NUMBER: 60/191,078
FRICR APPLICATION NUMBER: 60/206,848
FRICR FILING DATE: 2000-05-23
FRICR APPLICATION NUMBER: 60/206,335
FRICR APPLICATION NUMBER: 60/206,335
FRICR APPLICATION NUMBER: 60/200,335
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FRICR APPLICATION NUMBER: 60/200,335
FRICR FILING DATE: 2000-10-22
FRICR APPLICATION NUMBER: 60/200,335
FRICR APPLICATION NUMBER: 60/200,335
FRICR FILING DATE: 2000-12-22
FRICR APPLICATION NUMBER: 60/200,335
FRICR FILING DATE: 2000-12-22
FRICR FILING DATE: 2000-12-22
FRICR APPLICATION NUMBER: 60/200,336
FRICR FILING DATE: 2001-12-22
FRICR FILING DATE: 2001-12-22
FRICR FILING DATE: 2001-12-22
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FRICR FILING DATE: 2001-12-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      433 GGGGTGGTTCGCGCATATTCAATGGCGAATTTAAAGAACCCCGAAGGCATATGGGAGTTC 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       433 GGCAAGCGCCGCAGCTATTCCATGGCGAATGCGCCGCACAGGAAGGCCCGATCGAATTG 492
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      613 CGAAAGAGTCTTTGCATTGGCGGCGGTGCCGGGCTCT---CGTATGCGGCCGCTATTGCA 669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior Application data removed - See File Wrapper or FALM.
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 13; Length 1029;
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Pred. No. 0.097;
0; Mismatches 150; Indels
Sequence 13049, Application US/10282122A Publication No. US20040029129A1 GENERAL INFORMATION:
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                                                                                                      APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Olisen, Kari
APPLICANT: Olisen, Kari
APPLICANT: Walls oniel
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Best Local Similarity 47.8%;
Matches 140; Conservative
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APPLICANT: Epigenomics AG
TITLE OF INVENTION: Diagnose von bedeutenden genetischen Parametern innerhalb des MH
TITLE OF INVENTION: Diagnose von bedeutenden genetischen Parametern innerhalb des MH
FILE REFERENCE: E01/1208/W0
CURRENT APPLICATION NUMBER: US/10/312,841
CURRENT FILING DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 2
SEQ ID NO 1
LENGTH: 3673778
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673 CACGCCGTGTTCAAGAACCTGAACCGGCCGATGACGCTGTACTGGGGCGCACG 725
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
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Sequence 33544, Application US/10282122A

Publication No. US20040029129A1

GENERAL INFORMATION:
                                                                                                                                                                                                                                                        Sequence 1, Application US/10312841; Publication No. US20030186277A1; GENERAL INFORMATION:
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APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
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Wall, Daniel
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; NAME/KEY: unsure
; LOCATION: (3294164)
US-10-312-841-1
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RESULT 10
US-09-864-761-20742/c
US-09-864-761-20742, Application US/09864761
; Patent No. US20020048763A1
; GENREAL INFORMATION:
    APPLICANT: Pank, David R.
    APPLICANT: Hanzel, David R.
    APPLICANT: Chen, Wensheng
    TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USBFUL FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4390
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3794 AGGCAGACCATTCTCGATGCGCCGCTGCGCCAAGGCATCTATATCCGCATGCCTGTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                        Score 35.8; DB 15; Length
Pred. No. 0.61;
0; Mismatches 352; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            639 TGCCGGGCTCTCGTATGCGGCCGCTATTGCACGCGCCTCGATG 681
                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 43.4%;
Matches 279; Conservative (
     PEATURE:

NAME/KEY:

LOCATION: (3341)...(3697)

OTHER INFORMATION: tomO

FEATURE:

NAME/KEY: CDS

LOCATION: (3737)...(4795)

OTHER INFORMATION: tomP

FEATURE:

NAME/KEY: CDS

LOCATION: (4797)...(5132)

COTHER INFORMATION: tomQ

US-10-223-371B-1
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; Sequence 1, Application US/10223371B
; Publication No. US20030170877A1
; GENERAL INFORMATION:
    APPLICANT: Xano, Tetsuya; No. US20030170877A1cto, Tsuyoshi; Imamura, Takeshi; Canon
    APPLICANT: Xano, Tetsuya; No. US20030170877A1cto, Tsuyoshi; Imamura, Takeshi; Canon
    APPLICANT: Xabushiki Kaisha
    TITLE OF INVENTION: Diasmid, Transformed Microorganism, Method for Degrading Halogen
    TITLE OF INVENTION: Aliphatic Hydrocarbon Compounds and Aromatic Compounds, and Meth
    TITLE OF INVENTION: Brainformental Remediation
    TITLE OF INVENTION: Brainformental Remediation
    FILE REPERENCE: 03500.014074.1
    CURRENT APPLICATION NUMBER: US/09/453,956
    PRIOR APPLICATION NUMBER: US/09/453,956
    PRIOR FILING DATE: 1999-12-03
    NUMBER OF SEQ ID NOS: 14
    SEQ ID NO 1
    LENGTH: 5331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    424 AAGAAAGTCCCCGCAGAAGTCCTCTTCGCTCAACAGCATTGATGAGCCAGGCGGCTG 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        370 ACTGATGGGCCAGCAAATTTCCTCCCCGGCCAGTTCTGCCTAGTAGAGGCAGAGACAGTTG 429
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                                                                                                                                                                                                                                                                                                                                                                                                 Length 2394;
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PRIOR APPLICATION NUMBER: 60/257,931
PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
PRIOR FILING DATE: 2001-02-09
PRIOR PILING DATE: 2001-02-09
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR PILING DATE: 2001-02-16
NUMBER OF SEQ ID NOS: 78614
SOFTWARE: Parentin Version 3.1
LENGTH: 2394
                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Pseudomonas syringae
US-10-282-122A-33544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Ralstonia eutropha
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LOCATION: (446)...(1437)
COTHER INFORMATION: tomL
PEATURE:
NAME/KEY: CDS
LOCATION: (1470)...(1739)
OTHER INFORMATION: tomM
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LOCATION: (1777)...(3324)
OTHER INFORMATION: tomN
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LOCATION: (200)..(445)
OTHER INFORMATION: tomK
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191 CGCGAGATCGTGAGAAGGGCAACCGCCATCTTGCATGCCAGTGCGTTGCGCTCTCAGACC 250
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3.6%; Score 35.6; DB 13; Length 94
Best Local Similarity 50.6%; Pred. No. 0.29;
Matches 86; Conservative 0; Mismatches 84; Indels
                                                                                                                                                                                                             134 GCACTAAGTAATGCCCACTGAGATT 109
                                                                                                                            812 GCCTTTGGCAAGGGCCCACTGGTTTT
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; ORGANISM: Burkholderia fungorum
US-10-282-122A-12871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            251
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CRGANISM: Homo sapiens

PEATURE:

OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 8.5

OTHER INFORMATION: EXPRESSED IN PETAL LIVER, SIGNAL = 7.1

OTHER INFORMATION: EXPRESSED IN BAT44, SIGNAL = 8.3

OTHER INFORMATION: EXPRESSED IN BOULT LIVER, SIGNAL = 8.3

OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 8.3

OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1.0

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 8.3

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 8.3

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 5.6

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.5

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OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.5

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OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.5

OTHER INFORMATION: EXPRESSED IN HELLO, SIGNAL = 1.000+1.0
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TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
FILE REPREBRENCE: Accomica-X-1
CURRENT APPLICATION NUMBER: US 60/180,312
PRIOR PADLICATION NUMBER: US 60/180,312
PRIOR PLILANG DATE: 2000-02-04
PRIOR PELICATION NUMBER: US 60/207,456
PRIOR PELICATION NUMBER: US 60/207,456
PRIOR PELICATION NUMBER: US 60/207,456
PRIOR PELICATION NUMBER: US 60/207,456
PRIOR PELICATION NUMBER: US 60/207,456
PRIOR PELICATION NUMBER: US 60/207,656
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PRIOR PELICATION NUMBER: PCT/USO1/00664
PRIOR PELICATION NUMBER: PCT/USO1/00665
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PRIOR PELICATION NUMBER: PCT/USO1/00665
PRIOR PELICATION NUMBER: PCT/USO1/00665
PRIOR PELICATION NUMBER: PCT/USO1/00666
PRIOR APPLICATION NUMBER: PCT/USO1/00666
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PRIOR PELICATION NUMBER: PCT/USO1/00666
PRIOR APPLICATION NUMBER: PCT/USO1/00666
PRIOR APPLICATION NUMBER: PCT/USO1/00667
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PRIOR PELICATION NUMBER: PCT/USO1/00670
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                                                                                                                                             680 AGATTCCAGAAAACATCTTCTACTACTGCTGTATGCCCCGTAAAGATGGTCCTTGCATCC 621
                                                                                                                                                                                                                                                                                                       620 ACTITICCLICITIGGAAIGGCACIGAIGICCCACAGGCAGACAGIGIGGICAICIGAA 561
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                                                                              692 ACAAGCCGGTAAAGTTGTTCTACGCCTCAAGAACTCCGCGCGACGCTGTTCGGTGGATCG
                                                                                                                                                                                                                                    752 ATAICGACAICGATGAGGACAAGCTIGAGGICGTCCAGGCAGTIACGGAAGACACAGGATA
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APPLICANT: BUGWORTH, Paul R.
APPLICANT: Budworth, Paul R.
APPLICANT: Briggs, Steven P.
APPLICANT: Briggs, Steven P.
APPLICANT: Gooper, Bre
APPLICANT: Gooper, Bre
APPLICANT: Gooff, Stephen A.
APPLICANT: Katagiri, Fumiyaki
APPLICANT: Kreps, Joel
APPLICANT: Kreps, Joel
APPLICANT: Ricke, Darrall
APPLICANT: Ricke, Darrall
APPLICANT: Browners FOR REGULATION OF PLANT EXPRESSION
TITLE OF INVENTION: PROMOTERS FOR REGULATION OF PLANT
FILE REFERENCE: 60111-NP
CURRENT FILING DATE: 2001-09-26
PRIOR APPLICATION NUMBER: US 60/325,448
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-09-26
PRIOR FILING DATE: 2001-09-26
NUMBER OF SEQ ID NOS: 6077
SEQ ID NO 3074
LENGTH: 1240
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3.6%; Score 35.4; DB 16;
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Matches 90; Conservative 0; Mismatches 91;
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    77; Conservative
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Sequence 3981, Application US/09664761
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APPLICANT: Ranse, David R.
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N ADULT LIVER, SIGNAL = 8.3
N BRAIN, SIGNAL = 6.3
N BONE MARROW, SIGNAL = 7.8
N LUNG, SIGNAL = 11
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Score 35.6; DB 9; Length 1983; Pred. No. 0.43;

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Query Match Best Local Similarity

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APPLICANT: Nagarajan, Vasantha
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APPLICANT: Nagarajan, Vasantha
APPLICANT: Thomas, Studart
TITLE OF INVENTION: Use of Xylene Monooxygenase for the Oxidation of Substituted
TITLE OF INVENTION: Monocyclic Aromatic Compounds
TITLE OF INVENTION: Monocyclic Aromatic Compounds
TITLE OF INVENTION: WHERE: US NA
CURRENT APPLICATION NUMBER: US/10/213,878
PRIOR APPLICATION NUMBER: 60/311,490
PRIOR PILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 22
SOFTWARE: Microsoft Office 97
SEQ ID NO 11
LENGTH: 1038
                Sequence 3, Application US/10229124

Publication No. US20030013168A1

GENERAL INFORMATION:
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN ENZYME PROTEINS, AND USES TITLE OF INVENTION: THEREOF FILE OF INVENTION: THEREOF FILE REFERENCE: CLO01139DIV
CURRENT APPLICATION NUMBER VS/10/229,124
CURRENT APPLICATION NUMBER: 2020-08-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 3
LENGTH: 65042
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LOCATION: (1)...(65042)

COTHER INFORMATION: n = A,T,C or G

US-10-229-124-3
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ORGANISM: Human
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OM nucleic - nucleic search, using sw model	Run on: June 27, 2004, 03:11:33 ; Search time (without al 10708.573 M	Title: US-10-658-691-4 Perfect score: 1578 Sequence: 1 gtgcgacccaatcgcccattgcgcac	Scoring table: IDENTITY NUC Gapop 10.0 , Gapext 1.0	Searched: 3470272 segs, 21671516995 residues	Total number of hits satisfying chosen parameters:	Minimum DB seq length: 0 Maximum DB seq length: 2000000000	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	Database : GenEmbl:* 1: gb_ba:* 2: gb htg:* 3: gb_in:* 4: gb_om:* 5: gb_ov:* 6: gb_pat:* 7: gb_pt:*	9: gb_pr:* 10: gb_ro:* 11: gb_srs:* 12: gb_sy:* 13: gb_un:*	14: 9D v1:* 15: em_ba:* 16: em_fun:* 17: em_fun:*	14: em_in:* 18: em_in:* 19: em_mu:*	20: em om:* 21: em_or:* 22: em_ov:*	26: em_ro:* 27: em_sts:* 28: em_un:*		em htg	

Pred. No. is the number of results predicted by chance to have a

REFERENCE

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

AY026386 6442 bp DNA linear BCT 12-JUJ-2002 Rhodococcus erythropolis ISRhi transposase-like protein gene, famdA), transcription repressor KirA-like protein, and ISRhi transposase-like protein genes, complete cds; and unknown gene. AY026386.1 GI:21734944 Rhodococcus erythropolis Rhodococcus erythropolis Bacteria, Actinobacteria, Actinobacteridae, Actinomycetales, Corymebacterineae, Nocardiaceae, Rhodococcus. ACCESSION VERSION KEYWORDS SOURCE ORGANISM RESULT 1 AY026386 LOCUS DEFINITION

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Query Match 100.
Best Local Similarity 100.
Matches 1578; Conservative
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Trott,S., Burger,S., Calaminus,C. and Stolz,A.
Cloning and Heterologous Expression of an Enantioselective Amidase
Expression of an Enantioselective Amidase
Appl. Environ. Microbiol. 68 (7), 3279-3286 (2002)
22083458
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Direct Submission
Submitted (31-JAN-2001) Institut fuer Mikrobiologie,
Stuttgart, Allmandring 31, Stuttgart 70569, Germany
Location/Qualifiers
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KEYWORDS SOURCE ORGANISM	REFERENCE AUTHORS	TITLE	JOURNAL MEDLINE PUBMED REFERENCE	AUTHORS	TITLE JOURNAL MEDLINE	PUBMED REFERENCE AUTHORS TITLE	JOURNAL	FEATURES BOUTCE		gene			gene			gene
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661 GGCCTGGTGCCGTCTTACGGCCTGACATACATGGACCACACCTTGGACCACATGGACCACACGTTGGGCCC 720		781 CGCGACCCTCAGTGGGTGCGTAACCTTCCGGAGCCGGAGAACTACGGCTCCGGCTCGGC 840	GAGGGAGTATCCGGTCTGAGATTCGCGGTCGTCGAGGAGTCACTGGAGCCGAACGGTGCGGGTGCGGAGGAGTGCTGGAGGAGTCGTCGAGGAGTCACTGGAGGAGTCACTGGAGGAGTCACTGGAGGAGTCACTGGAGGAGTCACTGGAGGAGTCACTGGAGGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGAGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGGAGAGTCACTGAGAGAGTCACTGAGAGAGTCACTGAGAGAGTCACTGAGAGAGTCACTGAGAGAGTCACTGAGAGAGA	901 ACGCCGGACGTGATCGCCGCGTTCAACCAGGGACTGGCGGCGCTCGAGAGCGCCGGTGCG 960 	961 ACCATGAGGGGTCTCGGTGCCGTTGTGGACGCGGCCTGGCCTATCCAGAGCGGCGTG 1020 	1021 ATGGCTTTCAACGCGCGCGTATGGCGGACTCCGCCGGTGTGGGCTACTTCCACAGGGG 1080	1081 CGCGTGGACGTCAGCACCGTCACGACGGCGCCCAGAGGTCGCACCCACC	1141 CTGGCGATCCTGTCCCGGCTGATGCTGGTGATCGCGGACCTGCGGGACGACGAATACCTC 1200	1201 GGCATCCACTACGCGAAGGCGCAGAACCTGCGGCTGGAGCTCGGCAAGCAGGATCGACGC 1260	1261 GTCCTCCAGGACCGGGCTGCACTGCTGACCACGACCACGCCTACCGTTGCCAAAGTG 1320	1321 TTGAGGGGTGGGCAAGACCATGTCCATGATCCCAGGATGACGGGCAATGCGATCCTC 1380	1381 AACAGGTGCCGGTTGAACCTCACCGGTCACCCGGCGCTGACGGTGCCCACGGGTGCCGGC 1440	1441 GAGAAGGCCTGCCCGTTGGCCTCCAAGTGATAGGCCGCCACTTCGAGGAGTCGACGCTC 1500 	1501 TACCGCACCGGCGCGTGATCGAGGCCGCCGGCCTATGGGAGTCGCGGGGGGCGGAGC 1560 	1561 GCACCGGTGCGGTAG 1578 	RESULT 2 AP005935/c LOCUS AP005935 300600 bp DNA linear BCT 12-SEF-2003 DEFINITION Bradyrhizobium japonicum USDA 110 DNA, complete genome, section
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1/31. AP005935 BA000040 AP005935.1 GI:27348247

ACCESSION VERSION

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nd Tabata,S.
                                                                                                                                                                                                                     Complete genomic sequence of nitrogen-fixing symbiotic bacterium sradyrhizobium japonicum USDA110
NWA Res. 9 (6), 189-197 (2002)
22484998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Complete grounic sequence of nitrogen-fixing symbiotic bacterium
Bradyrhizobium japonicum USDA110 (supplement)
NA Res. 9 (6), 225-256 (2002)
2597279
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Submission
Submitted (20-NOV-2002) Takakazu Kaneko, Kazusa DNA Research
Institute, The First Laboratory for Plant Gene Research; 2-6-7
azusa-kamatari, Kisarazu, Chiba 292-0812, Japan
(B-mail:kaneko@kazusa.or.jp,
JRL:http://www.kazusa.or.jp/rhizobase/,
IR1:181-438-52-3956 (ex.2338), Pax:81-438-52-3934)
vradyrhizobium japonicum USDA 110
stadyrhizobium japonicum USDA 110
sacteria, Proteobacteria, Alphaproteobacteria; Rhizobiales;
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Best Local Similarity
Matches 677; Conserv
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Fallon, R. Donald., Nelson, M. James. and Payne, M. Scott.
Fallon, R. Donald., Nelson, M. James. and Payne, M. Scott.
Fallon, R. Donald., Nelson, M. James. and Payne, M. Scott.
Pydratase enzyme
Patent: US 6133421-A 20 17-OCT-2000;
Location/Qualifiers
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Location/Qualifiers
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                                                                                                                                                                                                                                                                        2502. 2505
//noce="5D sequence for beta subunit of nitrile hydratase"
2514. 3176
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGCCGCCCAGCTCGTTCCGGTCGTGGCGGAGATGGTGACTGCCTTCGACCTGATCGAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     217 CCGACCGGCGACGAGGACCCGTTCAACGCATTCATCCGGTTCTGCCGGGTGGAGGGCGCC
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                                      hydratase alpha subunit"
                                                                                                                                                                                                                                                                                                                                                                                                                                      /trans]_table=11
/product="nitrile hydratase beta subunit"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4439. 4443
/note="SD sequence for OrfE"
4450. .>5215
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="SD sequence for P47K"
3173. .4432
/note="unnamed protein product; P47K"
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48.8%; Pred. No. 3.9e-20;
iive 0; Mismatches 752;
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Best Local Simi:
Matches 731; (
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BGLIMQWHGNGAGRYMKGLYVGLLVGASWRDADGLDPRQAAPQVDDYCSYLEKGVP

GRYYARAQNLARPRAGGYVKLOTYDLLVMPTTPITAQPHPPANCSITEYVARALEM

GRYYARAQNLARPRAGGYVKLOTYDLLVMPTTPITAQPHPPANCSITEYVARALEM

GRYYARAQNLARPRAGYFULLVMAVAKHYARGTIXQAAAREASVDWRTL"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5215 bp DNA linear BCT 21-DEC-2002 hydratase alpha and beta subunits.
                                                                                                                              1327 GIGGCICGCGCGIIGGAAAIGAICGCAAATACCGCGCCACAGGACAICACCGGGCAICCG 1386
                                                                                                                                                                                              GCGCTGACGGTGCCGACGGCGAGAAAGGGCCTGCCCGTTGGCCTCCAAGTGATA 1473
                                                                                                                                                                                                                                                             1387 décardrégarité---édrérésecrisersakosáchtadochadacrasitation 1443
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/note="SD seguence for alpha subunit of nitrile hydratase"
1869. .2471
/EC_number="4.2.1.84"
1270 ACCACGCCCATCACGGCCCAACCCCACCGGCAG---CGAACTGCTCGATCACGGAGTAC 1326
                                                                                                                                                                                                                                                                                                                             1474 GGCCGCCACTTCGAGGAGTCGACGCTCTACCGCACCGGCCGCCGTGATCGAGGCCGCCG 1531
                                                                                                                                                                                                                                                                                                                                                                                  GCAAAACACTACGCCGAGGGCACGATTTACCAAGCGGCGGCGGCGTTTGAAGCCTCGG 1501
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2013568
These data kindly submitted in computer readable form by: Makoto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pseudomonas chlororaphis
Pseudomonas chlororaphis
Bacteria, Proteobacteria, Gammaproteobacteria, Pseudomonadales,
Pseudomonadaceas, Pseudomonas.
1 (bases 1 to 5215)
                                                                  1354 CCACGGATGACGGGCAATGCGATCCTCAACACGTGCCCGCTGGACCTCACCGGTCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 5215)
Nishiyama,M., Horinouchi,S., Kobayashi,M., Nagasawa,T.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Department of Agricultural Chemistry
The University of Tokyo
1-1-1 Yayoi, Bunkyo-ku
Tokyo 113
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/mol_type="genomic DNA"
/strain="B23"
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/EC_number="3.5.1.4"
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245. .248
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Location/Qualifiers
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/codon_start=1
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D90216.1 GI:216850
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PSEAMNH
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SDWGDWLPAAVAAADPDGIAVWYLGCNGVILKASDGTTLFVDPYLGTGDPPRTVRMIP
VPPDFRDVSDADAVLATHEHTDHVHGPSQAPLLADTGCSLXAPEASIAVARDDERWQD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DYAVTTDOYRRVAVGDTYDIGSFTVHYTPAHDDDAVQPVSYVFEHDAGTVFHGGDTKP
ADALAEIGAAHDIDVGILAFGSTGEIPDKOTREPSVTTWYNTETEVVACANALQLDRL
1580 GTGGCTCGCGCGTTGGAAATGATCGGCAATACCGCCCACAGGACATCACCGGCATCCG 1639
                                                                                                 1414 GCGCTGACGGTGCCCCACGGGTGCCGCCGAGAGGGCCTGCCCGTTGGCCTCCAAGTGATA 1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   translation="MRGDDIDSSAMTLITSYTCPRAVKCPGRTTERLGRGPPTAGMVH
                                                                                                                                                                GCCATGTCGATTC---CGTGTGCCTGCTGGACGGCCTGCCCGTCGGGCTGATGCTGGTC 1696
                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA linear BCT 12-FEB-2001 of 170 of the complete genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ng.W.V., Kennedy.S.P., Mahairas,G.G., Berquist,B., Pan,M., Shukla,H.D., Lasky,S.R., Baliga,N., Thorsson,V., Sbrogra,J., Shukla,H.D., Lasky,S.R., Baliga,N., Thorsson,V., Sbrogra,J., Swarzeall,S., Well.D., Hall,T., Dall,T.A., Well.,R., Goo,Y.A., Leithauser,B., Keller,K., Cruz,R., Danson,M.J., Hough,D.W., Maddocks,D.G., Jablonski,P.E., Krebs,M.P., Angevine,C.M., Dale,H., Isenbarger,T.A., Peck,R.F., Pohlschrod,M., Spudich,J.L., Jung,X.-H., Alam,M., Freitas,T., Hou,S., Daniels,C.J., Dennis,P.P., Omer,A.D., Ebhardt,H., Lowe,T.M., Liang,P., Riley,M., Hood,L. and DasSarma,S.
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Ng,W.V., Kennedy,S.P., Mahairas,G.G., Berquist,B., Pan,M.,
Shukla,H.D., Lasky,S.R., Baliga,N., Thorsson,V., Sbrogma,J.,
Swartzell,S., Welli,D., Hall,J., Dahl,T.A., Welti,R., Goo,Y.A.,
Leithauser,B., Keller,K., Cruz,R., Danson,M.J., Hough,D.W.,
Maddocks,D.G., Jablonski,P.E., Krebs,M.P., Angevine,C.M., Dale,H.,
Jung,K.-H., Alam,M., Freitas,T., Hou,S., Daniels,G.J., Dennis,P.P.,
Omer,A.D., Ebhardt,H., Lowe,T.M., Liang,P., Riley,M., Hood,L. and
DasSarma,S.
                                                                                                                                                                                                                                                                                GCAAAACACTACGCCGAGGGCACGATTTACCAAGCGGCGGCGGCGGCGTTTGAAGCCTCGG
                                                                                                                                                                                                                                  GGCCGCCACTTCGAGGAGTCGACGCTCTACCGCACCGGCGCCGTGATCGAGGCCGCCG
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USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genome sequence of Halobacterium species NRC-1
Proc. Natl. Acad. Sci. U.S.A. 97 (22), 12176-12181 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Halobacterium sp. NRC-1
Archaea, Euryarchaeota, Halobacteria, Halobacteriales,
Halobacteriaceae, Halobacterium.
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Submitted (14-JUL-2000) Institute for
Roosevelt Way NE, Seattle, WA 98105, U
Location/Qualifiers
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|protein_id="AAG19299.1"
|db_xref="G1:10580419"
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/strain="NRC-1"
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Halobacterium sp. NRC-1 section
AE005026 AE004437
AE005026.1 GI:10580418
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complement(74. .1033)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1163 ATCGCCCGACTCGAGGCGTTGGGCGCTCATGTCGAGCCGGTCTCCATTCCCGAGCACAAC 1222
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1114 GCCCAGAGTCGCACCACCACCACAAGGATCTGGCGATCCTGTCCCGGCTGATGCTGGTGATC 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1402
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Streptomyces coelicolor A3(2) complete genome; segment 21/29.
A1939124 AL023797 AL031031 AL031035 AL031124 AL031225 AL031231
AL031260 AL03447 AL035559 AL035569 AL355913 AL645882
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Submitted (09-MAY-2002) Submitted on behalf of the Streptomyces sequencing team, Sanger Institute, Welloome Trust Genome Campus, Hinxton, Cambridge G10.10 IsA E-mail: sdb@sanger.ac.uk
on or before Oct 26, 2002 this sequence version replaced
g1:2052064, g1:20520751, g1:20520752, g1:2052065, g1:20520811, g1:20520782
14405 CGGACGCGCCGACGGCTTCGGCGACGACGTCACGCGCCGCATCCTCCTGGGTA---
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Streptomyces coelicolor A3(2)
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Streptomycineae; Streptomycetaceae; Streptomyces.
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Nature 417 (6885), 141-147 (2002)
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VBDOFTHSBERTSLTREAGFGPEVYRRIMGOFTALSSGYNDAYYGSAGKVRTLIKQE
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/note="SC099.09, unknown, len: 164aa; similar to many of undefined function ag. TR:006336 (EMBL:Z95390)
hypochetical protein from Mycobacterium tuberculosis (177 aa) fasta scores; opt: 171, z-score: 213.4, E(): 0.00014, (34.9% identity in 109 aa overlap)."
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9816. 4112

/gene="SC05498"

/note="SC0999."

probable Glu-tRNA-Gln amidotransferase

subunit C gatC, len: 98aa; similar to many eg. TR:006492

(EMBL:AF00853) Glu-tRNAGIn amidotransferase subunit C,

gatC, from Bacillus subtilis (101 aa) fasta scores; opt:

232. z-score: 294.8, E(): 4.1e-09, (42.1% identity in 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="SC8D9.12, putative membrane protein, len: 79 aa.
Contains possible hydrophobic membrane spanning regions"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product="putative membrane protein"
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                                          CDS
                                                                                                                                             /note="SCED9.07, possible membrane associated phosphodieterase, len: 746 aa, similar to many eg. TR:09736 (EMBL:AR052518) c-di-GMP phosphodieterase A from Acetobacter xylinus cdg2 operon (752 aa) fasta scores; opt: 959, z-score: 1059.2, E(): 0, (31.7% identity in 603 aa overlap). Appears to have two distinct regions with the first 300aa containing several potential membrane spanning hydrophobic regions and the remainder of the protein showing similarity to the phosphodieterase mentioned above. Also similar to a nearby gene on the same cosmid (SC8D9.22) fasta scores; opt: 736, z-score: 625.6, E(): 5.3-90, (32.6% identity in 729 aa overlap). Contains TTA Leu codon, possible target for bldA regulation. Also contains Pfam match to entry PF0099 DUP9, Domain of unknown function, score 166.70, E-value 3.9e-46 and Pfam match to entry PP00563 DUP2, Domain of whydrophobic mebrane spanning regions" (codon state=1) (codon state=1)
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function, score 166.70, E-value 3.9e-46"
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/gene="SCO5501"
/note="SCO5501"
/note="SCO501,0 probable Glu-tRNA-Gln amidotransferase
subunit B. gatB, len: 504aa; similar to many eg. TR:030509
(EMBL-AF008553) Glu-tRNA-Gln amidotransferase subunit B,
gatB, from Bacillus subtilis (476 aa) fasta scores; opt:
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LRLLDAVVTGAAVVTNIAILYRELKRLGDDDVLLG"
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5483 Ikeda,H., Ishikawa,J., Hanamoto,A., Shinose,M., Kikuchi,H., Shiba,T., Sakaki,Y., Hattori,M. and Omura,S. Complete genome sequence and comparative analysis of the industrial 5423 GCACTGCTGACCCCGACCACGCCTACCGTTGCCAACGAGCTGTTGAGCGGTCGGCAAGAC 1338 (Gmura, S., Ikeda, H., Ishikawa, J., Hanamoto, A., Takahashi, C., Shinose, M., Takahashi, Y., Horikawa, H., Nakazawa, H., Osonoe, T., Kushida, N., Taketor-General of Biotechnology Center, Shiba, T., Sakaki, Y. and Hattori, M. Direct Submission Direct Submission Submitted (29-MR-202) Director-General of Biotechnology Center, Submitted (29-MR-202) Director-General of Biotechnology Center, National Institute of Technology and Evaluation, Biotechnology Center, S-49-10 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan (E-mail:bio@mite.go.jp, URL:http://www.bio.nite.go.jp/, Tel:81-3-3481-1933, Fax:81-3-3481-8424) TCGGCGAAGAGCTCACTGCCTGACCCGCAAGGCCGGCTTCGGCCCGGAGGTCAAGCGC GTIGGCCTCCAAGTGATAGGCCGCCACTTCGAGGAGTCGACGCTCTACCGCACCGGCGCC CTGATGCTGGTGATCGCGGAGCACCTGCGCGACGAATACCTCGGCATCCACTACGCGAAG cecarcarecreseaceceraceceristresacesearactaceaceceractaces <u> ecccadada en concercanca a concencia a concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de concencia de con</u> gradercrackantentececececentakaakaacaeceaetrenkakaagreadeee CTCACCGGTCACCCGGCGGCTGACGGTGCCCACGGG----TGCGGGCGAGAAGGGCCTGCCC AP005032 281450 bp DNA linear BCT 10-MAY Streptomyces avermitilis genomic DNA, complete genome, section GCGCAGAACCTGCGGCTGGAGCTCGGCAAGCAGATCGACGCCGTCCTCCAGGACCGGGCT <u> GTGATCGTCTCCCCGACGCCCGACCACCGCCTTCGCGATCGGCGAGCGCGCCGACGAC</u> 1339 ACCATGTCCATGATCCCACGGATGACGGGCAATGCGATCCTCAACACGGTGCCCGCTGGAC Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales; Omura, S., Ikeda, H., Ishikawa, J., Hanamoto, A., Takahashi, C., Shinose, M., Takahashi, Y., Horikawa, H., Nakazawa, H., Osonoe, T. Kikuchi, H., Shiba, T., Sakaki, Y. and Hattori, M. Genome sequence of an industrial microorganism Streptomyces avermitilis: deducing the ability of producing secondary GTGATCGAGGCCGCCCGCCTATGGGAGCTCGCCGCGAGCCGAGCG 1561 5589 (21), 12215-12220 GCCGTCGAGGCCGCCTTCGTGGAAAAGTGGGGCCACCCGCTGATCG Streptomycineae, Streptomycetaceae, Streptomyces.

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COMMENT

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ASNGGYPEPSYAEPNQESNSGGGRTASETFSAFDEFSYQDDWPKQDDYQSGYRSEYAP
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RIQLRPSDSGGTTAALVMLPVDVAQGKKVPGKEGGGAFGIGGPAAAQASAGYAAARRG
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GGVTTSGLPRRVPRANLVAGTAQQQQHQAGPQVSRAPDDVRGRLINLRRGIQQGRQAG
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DEIQQLDNWKLLTDMTKQATELAAALQDERDQSAGPLAHGATATDFTVKGVRQKTDRA
    This work was done in collaboration with Haruo Ikeda(*1), Jun Ishikawa(*2), Akiharu Hanamoco(*3), Chiqusa Takahashi(*3), Mayumi Shinose(*3), Hinoshi Horikawa(*4), Hidekazu Nakazawa(*4), Tomomi Osonoe(*4), Norihiro Kushida(*4), Hisashi Kikuchi(*4), Tadayoshi Shiba(*5), Yoshiyuki Sakaki(*6,*7), Masahira Hattori(*1,*7) and Sacoshi Omura(*1,*3).
Final finishing process and all annotation were done by H. Ikeda and J. Ishikawa.
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                                                                                                                                                                                                                                                                                                    **Intravance institute for Life Sciences, Kitasato University **2 National Institute of Infectious Diseases **3 The Kitasato Institute of Technology and Evaluation **5 School of Science, Kitasato University **6 Institute of Medical Science, University **7 RIKEN, Genomic Science, Center **7 RIKEN, Genomic Science Center Following url is also available.

**Intp://avermitilis.ls.kitasato-u.ac.jp.

In 281450
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gene="cysB"
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adeayrkadealaaaokaootadeaneralrmldkasrk"
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                                                                                                                                                                                                                                                                                                                                                        locus tag="PSPT02270"
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protein_id="AAO55786.1"
db_xref="GI:28852714"
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2091. _2264
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'note="pathovar: tomato"
35. .1050
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                                          'mol_type="genomic DNA"
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85. .1050
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'transl_table=11
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157362 CADAGCTGCGTGGCACAACTGCAAAGCCTCGGGGCCACGGTCGGCGAGGCAAGCGTGCC 157421
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(bases 1 to 1958)

(bases 1 to 1958)

(bases 1 to 1958)

(bases 1 to 1958)

(bases 1 to 1958)

(bases 1 to 1958)

(bases 1 to 1958)

(bases 1 to 1958)

Amidase coupled with low-molecular-mass nitrile hydratase from the decoupled with low-molecular-mass nitrile hydratase from and purification and characterization of the gene product

(bur. J. Blochem. 217 (1), 327-336 (1993)
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                                                                                  .57482 ccadargerrecaaddeaardderacaeardaacdreacdgeracraeaacaeac
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                                                                                                                                                                                                                                                                                                                                                                                            1158 GCTGATGCTGGTGATCGCGGAGCACCTGCGCGACGAATACCTCGGCATCCACTACGCGAA
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Direct Submission

Submitted (06-MAY-1993) Michihiko Kobayashi, Kyoto University,
Department of Agricultural Chemistry, Faculty of Agriculture;
Oiwake-tyo, Kitashirakawa, Sakyo-ku, Kyoto, Kyoto 606, Japan
(Tel:075-753-6114, Fax:075-753-6128)
Submitted (06-MAY-1993) to DBBJ by:
Michihiko Kobayashi
                                                                                                                                    157422 GTGGCACCATGGTGTGGCGCTGGACATGTGGAACGTCATCGCCACTGACGGCGCGGCGTA
                                                                                                                                                                                   1044 GGCGGACTCCGCCGGTGTGGGCTACTTCCACAAGGGGCGCGTGGACGTCAGCACCGCCGT
                                                                                                                                                                                                                                                                                        CACGA-----CGGCGGCCCAGAGTCGCACCACCACAAGGATCTGGCGATCTGTCCCG
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075-753-6128.
Location/Qualifiers
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                              QARYALPPVISNFIKQYPDVALHMYQGSPMQIAEMAAAGTVDPAIATEALEQFSDLVM
MPCYRWNRCVVVPQGHPLIKVPKLILELLABYPIVTVYFGFTGRSKLDEAFSHRGLVP
KVVFTAADADVIKTYVRLUGVGIVARMAVDEEVDSDLVVLDASDLFESSVTKIAFRR
GTFLAGPMCDPIEKSPHLTRRVMAKAIQCHNKQEMBELFANVELPVH"
COMPLEMENT (7787. .8521)
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Pred. No. 3.4e-18;
0; Mismatches 592; Indels
                                                                                                                                                                                     /locus tag="PSPTO2280"
complement(7787, 8521)
                                                                                                                                                                                                                                                                  locus_tag="PSPTO2280"
                                                                                                                                                                                                                                            gene="cysH"
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Best Local Similarity 50.8%;
Matches 632; Conservative
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Agrobacterium tumefaciens hypothetical procein, inpregulator-like protein, laminocyclopropane carboxylate deaminase-like protein, laminocyclopropane carboxylate deaminase-like protein, Bkdk transcription regulator-like protein, enanticoselective amidase (amdA), amide/urea-binding Fmdb-like protein, amino acid transport LivH-like protein, amino acid transport BraB-like protein agene, complete cds; and amino acid transport BraB-like protein AF115580
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CACCGAAGGCTTCGACACCCCTGTCTCCGACGCTGGACAATGCCGTCGGACGC 1121
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Trott,S., Bauer,R., Knackmuss,H.J. and Stolz,A.
Genetic and biochemical characterization of an enantioselective amidase from Agrobacterium tumefaciens strain d3
Microbiology 147 (Pt 7), 1815-1824 (2001)
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Rhizobiaceae; Rhizobium/Agrobacterium group; Agrobacterium
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Submitted (23-OCT-2000) Institut fuer Mikrobiologie,
Stuttgart, Allmandring 31, Stuttgart 70569, Germany
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Agrobacterium tumefaciens
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| protein | id="BAA03744.1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product="1-aminocyclopropane carboxylate deaminase-like protein"
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/note="ORF4"
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FEATURES
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EPA"
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RGYKGMKIAILKEGFGHDGSDGMLASDPLYDDCVRSAMETFRGLGAEVAEVSIPEHLT
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3NPYDPTRNPGASSNGSAVLISTGOVDLAIGGDOGGSIRLPSAWCGVYGLKPTYGLVP
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                                                                                                                                                                            5604. .6863
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Best Local Similarity 49.1
Matches 749; Conservative
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1216 AAGGOGCAGAACCTGCGGCTGGAGCTCGGCAAGCAGATCGACGCCGTCCTCCAGGACCGG 1275
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C12R1:01), (C12N9/88,C12R1:01);
strandedness: Double;
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DEFINITION
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Nuclectide sequence of Rhodococcus rhodochrous genomic DNA region containing amidase and nitrilehydratase genes. 5147 AAGGCGCAGAACCAACGTCACCTCATCAATGAAGCGTATGACAGGGTCTTGTCCGAATAC 5206 1336 GACACCATGTCCATGATCCCACGGATGACGGGCAATGCGATCCTCAACACGTGCCCGCTG 1395 5207 dararcarrererecedededareceredecrrecededadareareareae Rhodococcus rhodochrous
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CIZNI5/09,CO7H21/04//CIZN9/80,CIZN9/88,(CIZNI5/09,CIZR1:01), Rhodococus rhodochrous
Rhodococus rhodochrous
Rhodococus rhodochrous
Bacteria, Actinobacteridae, Actinomycetales;
Corymbacterineae, Nocardiaceae, Rhodococcus.

(bases 1 to 4775)
Aoyama, S. and Yoshida, N.
NITRILE HYDRATASE GENE AND AMIDASE GENE DERIVED FROM RHODOCOCCUS
BACTERIUM H GACCTCACCGGTCACCCGGCGCTGACGGTGCCCACGGGTGCGGGCGAGAAGGGCCTGCCC 5264 GCGGGTACGCTCGATACGGTGGTCAACCAGTTGAACCAGCTTCGCAACACTGCCGTCTGC 5324 GACCTGACCGCCATCCCTCGATGTCGGTGCCTTGCGGACTGCGTG---AGGGGTTGCCT GTTGGCCTCCAAGTGATAGGCCGCCACTTCGAGGAGTCGACGCTCTACCGCACCGGCGCC /product='nitrilehydratase alpha subunit' subunit, F e 1. .4775 /organism='Rhodococcus rhodochrous' /strain='IRO15564' beta /product='nitrilehydratase 71. .4570 roduct='unknown protein' 4775
 organism="Rhodococcus rhodochrous" , Location/Qualifiers 330. .334 345. .1910 /product='amidase' Patent: JP 1997009973-A 3 14-JAN-1997; CHISSO CORP

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The complete genome sequence of Chromobacterium violaceum reveals
remarkable and exploitable bacterial adaptability
Proc. Natl. Acad. Sci. U.S.A. 100 (20), 11660-11665 (2003)
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Chromobacterium violaceum ATCC 12472
Bacteria, Proteobacteria, Betaproteobacteria, Neisseriales,
Neisseriaceae, Chromobacterium.
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                                                                                                                                                                                                              336
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                                                                                                                                        CCGACCGGCGACGAAGACCCGTTCAACGCATTCATCCGGTTCTGCCGGGTGGAGGGCGCC 276
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                                                                                                                                                                                                                                                                                ATGCCCACCACGAACGGGTCCCGGATGCTCCCGACTGTGATCGCCACCGAGGATGCCGTG
                                                                                                                                                                                                                                                                                                                  GTTCCGATGATGAACGGGTCTCGGACAGTAGAGGGGTTCACTCCGTCTCGCGACGCGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCGCCCACGGCACGGGTGGATCTTCCAGCGGCTCCGGCGCTGCCGTCGCTGCCGGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            834 CCACAGGGTGAAGCAGGTGGATCATCCGGTGGCAGTGCGGCTCTCGTCGCAAACGGTGAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               874 GAGGAGTCACTGGAGCCGAACGGTGCGACGCCGGACGTGATCGCCGCGTTCAACCAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             934 CTGGCGCCGCTCGAGAGCGCCCGCTGCGACCATCGAGCGGGTCTCGGTGCCGTTGTGGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGGCCCAGAGTCGCACCACACAAGGATCTGGCGATCCTGTCCCGGCTGATGCTGGTG
                                                                                                                                                                                                                                                                                                                                                                                      ATGGCGAT---GGGTATCGGTGAAGGCAGCGTCTACGGTCCTGCGCTGAACCCGAACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCGACTTCGCCCTGGGCGTCGATGAGGCAGCAGCATCCGGATCCCGGCCGCATGGTGC
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                                                                                                                                                                             CCAACAGCGAGGGAAAATCCTTTGAGCGCTTGGTATGTGACCACAAGCATCCCGCCGACG
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                                                                                                                                                                                                                ACGGAGGGGCCACTGAGCGACCTGACCGCCGCGATCAAGGACTGCATCGCCATCGCCGGT
                                                                                                          Gaps
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                                                                         Length
                                                                                                         Indels
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Pred. No. 3.6e-15;
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                                                                       11.8%;
47.8%;
                                                                                                         Conservative
                                                                                        Similarity
                                                                                                         627;
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FEATURES

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RAGDLAALITNLEPHDVLFIDEIHRLSPVVEBILYPALEDYQIDIMIGEGPAAKSVKI
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KLLOAILEKESGGPVGLDNVAAAIGESTDTIEDVIEFFLIQQGYLQRTFRGRWATAQA
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8726. 9358
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product="type" IV pilin"
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SDRHQPAVPRRPAIGQATGLRPGATGDAVAAGGPDGGPPGLCAGPGRGCPALSAGQA
IAVPARRLPARTGRRAGRDETQPGTTAQDRGGRRLSGABRRSPAAEPSGRGMAAPAPT
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Computacao Cientifica, Rua Getulio Vargas 333, Petropolis.
25651070, Brazil
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Location/Qualifiers (1094). (2491).
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JP 2001292772-A/2
23-OCT-2001
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Kamaike, H. and Aoki, Y.
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/jours tag="CV4216"
8726. _9358
/gene="ribB"
/locus tag="CV4216"
/note="identified by sequence similarity; putative; ORF
located using GeneMark/Blastx/COG0108"
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                                                                                                                                            Gaps
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al Similarity 49.2%;
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HARDMI KAMAIKE, YUJI AOKI
C12N15/09,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C12N9/80,C12N9/88,C12P13/00,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09,C12N15/09, 5 BD061400 2822 bp DNA linear PAT 27-AUG-20 Rhodococcus bacterium-derived nitrile hydratase gene and amitase Rhodococous bacterium-derived nitrile hydratase gene and amitase Patent: JP 2001292772-A 2 23-OCT-2001; ACCGACCGGCGACGAAGACCCGTTCAACGCATTCATCCGGTTCTGCCGGGTGGAGGGCGC 1140 TCTGGCGATCCTGTCCCGGCTGATGCTGGTGATCGCGGAGCACCTGCGCGACGACGATACCT coaccacicaacciccicarcerceraciacianacea---croaccaccaccaracta 1440 CGAGAAGGGCCTGCCCGTTGGCCTCCAAGTGATAGGCCGCCACTTCGAGGAGTGACGCT CGTCCTCCAGGACCGGGCTGCACTGCTGACCCCGGACCACGCCTACCGTTGCCAACGAGCT ceccriceaecacerearearcereaececeeceeceecececeeceeceeceeceecereara 1320 GITGAGCGGTCGGCAAGACACCATGTCCATGATCCCACGGATGACGGGCAATGCGATCCT CAACACGTGCCCCGCTGGACCTCACCGGTCACCCGGCGCTGACGGTGCCCCACGGGTGCCGG CGGCATCCACTACGCGAAGGCGCAGAACCTGCGGCTGGAGCTCGGCAAGCAGATCGACGC Gaps 9 Length 2822; Indels Bacteria, Actinobacteria, Actinobacteridae, Corynebacterineae, Nocardiaceae, Rhodococcus C12R1:01), C12N15/00,C12N5/00,(C12N15/00,C12R1:01) 11.5%; Score 182.2; DB 6; Similarity 53.4%; Pred. No. 1.5e-14; 29; Conservative 0; Mismatches 368;

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933 ACTGGCGGCGCTCGAGAGCGCCGGTGCGACCATCGAGCGGGTCTCGGTGCCGTTGTGGAC 992
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                                                                                                                                                                                                                                                                                                                        396 GGTGGTGGAGCGGCTGCTCGCGGCAGGCGCCACCATCGTCGGCAAGACGAACCTCGAGGA 455
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cyano group of a nitrile compound to a carboxyl group. Also described care: (1) a microorganism for use in the novel method; (2) a plasmid containing DNA for Rhodococcus nitrilase gene; (3) a host transformed by the plasmid of (2); (4) a nitrilase gene, comprising a 151 base pair sequence (AAE1941), and encoding a 366 residue amino acid sequence (AAE38067); (5) producing nitrilase, comprising culturing the host of (3) under expression conditions, and recovering the polypeptide; (6) a nitrile hydratase gene, comprising a 2822 base pair sequence (AAH21844), encoding a 282 nitrile hydratase beta subunit (AAB98068) and a nitrile hydratase alpha subunit (AAB98069); (7) producing amides using hosts transformed by a 2822 base pair sequence (AAH21845), encoding for Rhodococcus amidase (AAB98070). The method can be used for producing carboxylic acids and cyanocaboxylic acids which are useful in hybrar chemicals. agricultural drugs, dyes and as starting materials for
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Probe Sq762 (AAQ11989) and probe Sq918 (AAQ11990) were used to screen genomic Brevibacterium DNA. Both probes hybridised strongly to a 5.4kb pst I fragment. Cloning and restriction analysis of this fragment showed that the gene coding for the enantioselective amidase is located on a 2.3kb Bantil-Perl fragment (oriented in the direction Bantil rowards Perl). The fragment was sequenced. See also AAQ11988 and AAQ11992. (Updated on 2.5-MAR.2003 to correct DA field.) (Updated on 27-AUG-2003 to correct OS
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25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct field.) (Updated on 27-AUG-2003 to correct OS field.)
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                                                                                                                                                                                                                        Gaps
                                                                                                                                                     ch 11.5%; Score 180.8; DB 2; Length 1879; 1 Similarity 48.1%; Pred. No. 2.8e-22; 704; Conservative 0; Mismatches 742; Indels 18;
                                                                                         Sequence 1879 BP; 409 A; 612 C; 531 G; 327 T; 0 U; 0 Other;
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Carr GJ,
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2002US-0362699P.
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                                                                                                                              This is the nuclectide sequence encoding an amidase from Rhodococcus rhodochrous strain IFO15564. The coding sequence was isolated by screening a genomic R. rhodochrous DNA library in EMB13 vector, using a probe amplified by the primers R62388-9. The primers amplified a 0.7 kb fragment of the amidase gene. The library screen isolated a phage containing a 15 kb insert. When analysed the insert was seen to contain an approx. 6 kb Sacl-EcoRI fragment (see T62387) containing the open subunits (162386) and another open reading frame encoding a 399 amino acid protein (W14162) of unknown function. The enzymes, prepared by genetic enginesing methods, can be used in the industrial production of
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                                       useful
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                                     lococcus rhodochrous nitrile hydratase and amidase genes industrial preparation of useful cpds.
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1566 BP; 318 A; 519 C; 456 G; 273 T; 0 U; 0 Other;
                                                                                                Claim 1; Page 5-7; 16pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 48.5%;
Matches 637; Conservative
AAW14159
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New antisense nucleic acids, useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to isolate candidate molecules for rational drug discovery programs.

Claim 14; SEQ ID NO 25553; 1766pp; English

The invention relates to an isolated nucleic acid comprising any one of the 6213 antisense sequences given in the specification where expression of the nucleic acid inhibits proliferation of a cell. Also included are:

(1) a vector comprising a promoter operably linked to the nucleic acid cell a vector if (2) a host cell containing the vector; (3) an isolated or nucleic acid; (4) an antibody capable of specifically binding the polypeptide or its fragment whose expression is inhibiting cellular comprised (5) producing the polypeptide; (6) inhibiting cellular or the polypeptide; (6) producing the polypeptide; (6) inhibiting cellular proliferation or the activity of a gene in an operon required for proliferation or that has an activity against a biological pathway required for proliferation, or that inhibits cellular proliferation or the biological pathway required for proliferation, or that inhibits cellular proliferation of an identifying a gene required for cellular proliferation or the biological pathway or a gene no which the test compound that inhibits proliferation of an organism acts; (9) manufacturing an antibiotic; (10) prolifing a compound actual inhibits proliferation of compound actual inhibits the extent or which each of the straining the target of a compound that inhibits the extent or confideration of an organism. The antisense nucleic acids are useful for dentifying proceins or screening for homologous mucleic acids are useful for dentifying proceins or screening for homologous mucleic acids required for an organism. K. pneumoniae or P. aeruginosa. The present sequence is one of the target prokaryotic essential genes. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in flep.wipo.int/pub/published_pot_sequences drug discovery programs, or for screening homologous nucleic acids required for proliferation in cells other than S. aureus, S. typhi

Sequence 1479 BP; 199 A; 542 C; 526 G; 212 T; 0 U; 0 Other;

ÿ 213 GCCGCTGGCCGGGGTGCCGCTGGCGCTCAAGGACGTCTTCACCACCACCACGACATGCCCAC 272 CACGAACGGGTCCCGGATCCCCGACTGTGATCGCCACCGAGGATGCCGTGGTGGTGGTGGT GCGGCTGCTCGCGGCAGGGGCCATCGTCGGCAAGACGAACTCGAGGACATGGCGAT 464 521 GGGCTCCTCGACCGAGAACTCGGCCTACGGCCCGGACCCGCAACCCCGTGGAATGTCGAGCG 452 581 285 GCCACTGAGGGACCTGACCGCCGCGATCAAGGACTGCATCGCCATCGCCGGTATGCCCAC 273 CACCTGCGGGTCCAAGATTCTGCAGGGCTGGCGTTCGCCGTACGACGCCACCGTCACCAC GAAGCTGCGGGCCGCGGGCATCCCGATCCTGGGCAAGACCATGGACGAGTTCGCGAT GGGTATC---GGTGAAGGCAGCGTCTACGGTCCTGCGCTGAACCGAACAACCCCGCCCA CGGCACGGGTGGATCTTCCAGCGGCTCCGGCGCTGCCGTCGCTGCCGGCATGGTCGACTT CGCCCTGGGCGTCGATGAGGCAGGCAGCATCCGGATCCCGGCCGCATGGTGCGGACTGGT 513 Gécentosécrocéantes de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de contra de Gaps 33; DB 7; Length 1479; Score 175.2; DB 7; Length Pred. No. 2.6e-21; 0; Mismatches 613; Indels Query Match
11.1%;
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from base 3300001 (Mycobacterium tuberculosis strain LOCUS AAI99683 Accession Aa199683 End 1052 1112 1049 1412 1469 1172 1394 1395 CATGGCGCCGCGCGGCGACGACCGGTTGTACCGGGTCGGCCCGCCTACGAGGCCGC 1454 989 1290 TCTGTTCGA-------CCTGTGCACGCTGCCCCTGAACCTGGCCGGGCACTG 1334 692 821 881 809 935 869 992 CGGGGTCAACGCCACCTACGGCACGGTGCCCGGTACGGCCTGGTGGCCTGCGCTCATC 632 761 GTTGGCCGGGCCGACTGGCGCGACCCTCAGTGGGTGCGTAACCTTCCGGAGCCGGAGAA CTACGGCTCCGCGCTCGGCGAGGGAGTATCCGGTCTGAGATTCGCGGGTCGTCGAGGAGTC CGTCGGCGCCCCGGGCCGGGGGGGGGGGGGGGGCCTCAAGGGTGTTCGGGTCGGGGTGGT GOCGCCCT---CGAGAGCGCCCGGTGCGACCATCGAGCGGGTCTCGGTGCCGTTGTGGAC cececroscoscoracinacos an información de acometica de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de confecce de c GGCCCAGAGCCCACCACCACAAGGATCTGGCGATCCTGTCCCGGCTGATGCTGGTGAT 1050 GAIGGCGCTGACCCGGGCCGCCGGGTTCGGCCCGGAGGTCAAGCGGCGCATCATGATCGG CACCTACGCGCTGTCCGCGGGCTACTACGACGCCTACTACAACCAGGCCCAGAAGGTGCG 1170 CACCCTGATCGCCGCGCGATCTCGACGCCGCGTACGAGTCCGTCGACGTGGTGGTCTCGCC 1293 GACCACGCCTACCGTTGCCAACGAGCTGTTGAGCGGTCGGCAAGACACCATGTCCATGAT 1230 GGCCACCCGCACCGCGTTCGGGCTGGGGGAGAAGGTCGACGACGACGCTGGCCATGTA CCCACGGATGACGGGCAATGCGATCCTCAACACGTGCCCGCTGGACCTCACCGGTCACCC 1335 CGGCATGTCGGTGCCATCCGGATTGTCGCCCGACGACGACCTGCCGGTGGGGTTGCAGAT 1470 GATAGGCCGCCACTTCGAGGAGTCGACGCTCTACCGCACCGGCGCCGTGATCGAGGCCGC 693 GATCGCCGGCCACGACATCCGCGACTCCACCTCCGT---CGACGCGCCGGTGCCCGACGT 870 CGAGCAGTTGACCGCGCTGGGCGCCGAGGTCAGCGAGGTCGACTGCCCGCACTTCGAGTA CGCCGGTGTGGGCTACTTCCACAAGGGGCGCGTGGACGTCAGCACCACCGCCGTCACGACGGC cardedatecectacecearcecearcescarcecardedeager 1233 GCTGGAGCTCGGCAAGCAGATCGACGCCGTCCTCCAGGACCGGGCTGCACTGCTGACCCC 882 ACTGGAGCCGAACGGTGCG-----ACGCCGGACGTGATCGCCGCGTTCAACCAGGGACT CAAGCAGCTGCGCGGGGAGAGATATCAGCCCGGCGTGCTGGCCTCCTTCGAGGCCGCCGT CGCGGAGCACCTGCGCGACGAATACCTCGGCATCCACTACGCGAAGGCGCAGAACCTGCG GGCGCTGACGGTGCCCACGGGTG---CGGGCGAGAAGGGCCTGCCCGTTGGCCTCCAAGT GCTGGATCAGGGCGCGCGCGCGCGCGCACCGTGCTCGACACCGCGCTGCTGCACCAGGT CTTGGACCACCATCGGGCCCATCACCAGGGGGTCGAGCTCAACGCCCCGGGTTCTCGAGGT 110000 210000 310000 410000 1530 CGGCCTATGGGAGCTCGCCGCG 1551 1455 GCGCGCCCGCTGCGCAGCGCG 1476 fragments Begin AA199683 100001 200001 300001 of 44 AAI99683_33/C
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drug design; gene.
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(1) a vector comprising a promoter operably linked to the nucleic acid encoding a polypeptide whose expression is inhibited by the antisense nucleic acid; (2) a host cell containing the vector; (3) an isolated polypeptide or its fagment whose expression is inhibited by the antisense nucleic acid; (4) an antibody capable of specifically binding the polypeptide or its fagment whose expression is inhibited by the antisense nucleic acid; (4) an antibody capable of specifically binding the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular proliferation or the activity of a gene in an operon required for proliferation or that has an activity against a biological pathway in which a proliferation, or that inhibits cellular proliferation of the gene required for cellular proliferation of the test compound that inhibits proliferation of an organism acts; (9) manufacturing an antibiotic; (10) profiling a compound,'s activity; (11) a culture comprising strains in which the gene product is overexpressed or underexpressed; (12) determining the extent to which each of the strains is present in a culture or collection of strains; or (13) identifying the target of a compound that inhibits the compound discovery programs, or for screening for homologous mucleic acids required for proliferation to isolate candidate molecules for rational dantifying proteins or screening for homologous mucleic acids required for proliferation in cells other than S. aurens, S. typhimurium, K. preumoniae or P. aeruginosa. The present sequence is one of the target of prokaryotic essential genes. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in cell electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense nucleic acids, useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to isolate candidate molecules for rational drug discovery programs.
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Xu HH;
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10.9%; Score 172; DB 7; Length 1482;
Best Local Similarity 49.0%; Pred. No. 9.1e-21;
Matches 624; Conservative 0; Mismatches 620; Indels 30
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Forsyth RA,
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Yamamoto R,
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Carr GJ,
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The invention relates to an isolated nucleic acid comprising any one of the 6213 antisense sequences given in the specification where expression of the nucleic acid inhibites proliferation of a cell. Also included are:

(1) a vector comprising a promoter operably linked to the mucleic acid encoding a polypeptide whose expression is inhibited by the antisense nucleic acid; (2) a host cell containing the vector; (3) an isolated polypeptide (5) producing the polypeptide; (5) inhibiting cellular proliferation or the activity of a gene in an operon required for proliferation or that has an activity against a biological pathway the gene product or that has an activity against a biological pathway in which a proliferation, or that inhibits cellular proliferation; (8) identifying a gene required for cellular proliferation or the biological pathway in which the test compound that inhibits proliferation of an organism acts; (9) manufacturing an antibiotic; (10) profilling a compound; a activity; (11) a culture comprising strains in which the gene product is conground; a activity; (11) a culture comprising strains in which the gene product is conground; a activity; (11) a culture comprising strains in which he gene computed section of an activity; or which each of the strains is present in a culture or collection of strains; or (13) identifying the target of a compound that inhibits the
CCGGCCACTGCGGCAFGTCTGTGCCGTCGGGGCTCTCCCCGGACGACGGGTTGCCGGTTG 1387
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for homologous nucleic acids required for cellular proliferation
isolate candidate molecules for rational drug discovery programs.
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identifying proteins or screening for homologous nucleic acids are useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to isolate candidate molecules for rational drug discovery programs, or for screening homologous nucleic acids required for proliferation in cells other than S. aureus, S. typhimurium, K. pneumoniae or P. aeruginosa. The present sequence is one of the target prokaryotic essential genes. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
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This is the nucleotide sequence of a fragment isolated from Rhodococcus rhodochrous strain IFO1564. The sequence was isolated by screening a genomic R. rhodochrous DNA library in EMBL3 vector, using a probe amplified by the primers T62388-9. The primers amplified a 0.7 kb fragment of the amidase gene. The library screen isolated a phage containing a 15 kb insert. When amalysed, the insert was seen to contain an approx. 6 kb SacI-EcoRI fragment containing the open reading frames for the amidase gene (T63385), the nitrile hydratase alpha and beta subunits (T62386) and another putative open reading frames amino acid protein (W14162) of unknown function. The enzymes, prepared by genetic engineering methods, can be used in the industrial production of
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P-PSDB; AAW14159, AAW14160, AAW14161, AAW14162.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to an isolated nucleic acid comprising any one of the 6213 antisense sequences given in the specification where expression of the nucleic acid inhibites proliferation of a cell. Also included are:

(1) a vector comprising a promoter operably linked to the nucleic acid concluded are:

(2) a vector comprising a promoter operably linked to the antisense nucleic acid, (2) a host cell containing the vector; (3) an isolated polypeptide or its fragment whose expression is inhibited by the antisense nucleic acid, (4) an antibody capable of specifically binding chieffers and or the activity of a gene in an operon required for proliferation or the activity of a gene in an operon required for proliferation or that has an activity against a biological pathway to agene product or that has an activity against a biological pathway in which a proliferation or that inhibits cellular proliferation of an organism acts, (9) manufacturing an antibiotic; (10) profiling a compound's activity; (11) a culture comprising strains in which the gene or granism acts, (9) manufacturing an antibiotic; (10) profiling a compound's activity; (11) a culture comprising strains in which the gene product is overexpressed or underexpressed; (2) determining the extent to which each of the strains is present in a culture or collection of strains; or (13) identifying the target of a compound that inhibits the
  1074 CTCTCGGTCATCGCCGGTCGCGACGGTAACGACCCACGCCAAGCCGACGCGT---CGAA 1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense nucleic acids, useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to isolate candidate molecules for rational drug discovery programs.
                                              873
                                                                                   1131 GCAGGTGACTATCTGTCCACCCTCGACTCCGATGTGGATGTGGATCGGAATCGGGATCGTT
                                                 CCGGAGAACTACGGCTCCGCGCTCGGCGAGGAGTATCCGGTCTGAGATTCGCGGTCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zyskind JW;
Xu HH;
                                                                                                                                                                                             1241
                                                                                                                                            874 GAGGAGTCACTGGAGCCGAACGGTGCGACGCCGGACGTGATCGCCGCGTTC 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ds; prokaryotic essential gene; cell proliferation;
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Yamamoto R,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Prokaryotic essential gene #7865
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Carr GJ,
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06-SEP-2001; 2001US-0094893.
25-OCT-2001; 2001US-034292BP.
08-FEB-2002; 2002US-03072851.
06-MAR-2002; 2002US-0362699P.
                                                                                                                                                                                                                                                                                                                     ACA26208 standard; DNA; 1488
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Trawick JD,
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P-PSDB; ABU22338.
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proliferation of an organism. The antisense nucleic acids are useful for identifying proteins or screening for homologous nucleic acids required for cellular proliferation to isolate candidate molecules for rational drug discovery programs, or for screening homologous nucleic acids required for proliferation in cells other than S. aureus, S. typhimurium, K. preumoniae or P. aeruginosa. The present sequence is one of the target prokaryotic essential genes. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at
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drug design.
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Xu HH;
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P-PSDB; AAU36428.
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antibacterial;
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26-MAY-2000;
23-OCT-2000;
27-NOV-2000;
22-DEC-2000;
16-FEB-2001;
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Yamamoto RT,
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The invention relates to antisense inhibitors of genes essential to prokaryotic cellular proliferation, their use in identifying the genes, their use in the discovery of novel antibiotics, the essential genes themselves and the encoded proteins. The prokaryotes used are Escheridia coli, Staphylococcus aureus, Salmonella typhi, Klebsiella pneumoniae, Pseudomonas aseruginosa and Enterococcus faecalis. The invention is also useful for the identification of potential new targets for antibiotic development. The antisense nucleic acids can also be used to identify antibodies capable of binding to the express these proteins. The proteins can be used to screen compounds in rational drug discovery programmes. The proteins can be used to screen compounds in rational drug discovery programmes. The used to screen compounds in rational drug discovery programmes. The proteins can be used to screen compounds for call proliferation in a wide variety of organisms. The present sequence encodes an essential prokaryotic cellular proliferation protein. Note: The sequence data for this patent cellular proliferation protein. Note: The sequence data for this patent electronic format directly from WHOO at the was obtained in electronic format directly from WHOO at sequences
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9.6%; Score 151; DB 4; Length 14
Best Local Similarity 49.0%; Pred. No. 3.7e-17;
Matches 598; Conservative 0; Mismatches 590; Indels
Claim 27; SEQ ID NO 7924; 511pp; English.
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                                                          1050 CTCCGCCGGTGTGGGCTACTTCCACAAGGGCGCGTGGACGTCAGCACCGCCGCCGTCACGAC 1109
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GG---TCGAGGAGCTGAAGACGCTCGGCGCCACGGTGAAGGACATTTCCCTGCCGAACAT 899
                                                                                                              Zyskind JW;
Xu HH;
                                                                                                                                                                                                                                                                                        GGCGCCCAGAGCCCACCACACAAGGATCTGGCGATCCTGTCCCGGCTGATGCTGGT
                                                                                                                                                                                                                             960 GCGCTTCGACCGCGTGCGCTATGCTATCGTTCCGACCCCCCCGCACAACCTGGAAGACCT
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Forsyth RA,
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Yamamoto R,
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Carr GJ,
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06-SEP-2001; 2001US-0094893.
25-OCT-2001; 2001US-0342923P.
08-FEB-2002; 2002US-00572851.
06-MAR-2002; 2002US-0362699P.
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Trawick JD,
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P-PSDB; ABU38748,
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The invention relates to an isolated nucleic acid comprising any one of the 6213 antisense sequences given in the specification where expression of the mucleic acid inhibites proliferation of a cell. Also included are:

(1) a vector comprising a promoter operably linked to the nucleic acid encoding a polypeptide whose expression is inhibited by the antisense nucleic acid; (3) a host cell containing the vector; (3) an isolated oplypeptide for its fragment whose expression is inhibited by the antisense nucleic acid; (4) an antibody capable of specifically binding the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular proliferation or the activity of a gene in an operor required for proliferation, or that has an activity against a biological pathway required for that has an activity against a biological pathway in which a proliferation, or that inhibits cellular proliferation; (8) identifying a gene required for cellular proliferation or the biological pathway in which the test compound that inhibits proliferation of an organism acts; (9) manufacturing an antibiotic; (10) profiling a compound; a activity; (11) a culture comprising strains in which the test compound that inhibits proliferation of compound; a activity; (11) a culture comprising strains in which he cap accompanied that inhibits or collection of strains; or (13) identifying the target of a compound that inhibits the proliferation of an organism. The antisense nucleic acids are useful for dentifying proceasing or screening for homologous nucleic acids required for a conjuder and a sequence or the capital and an organism. The mitsense nucleic acids are useful and a conjuderation of the strains is processed to a compound and a sequence or the capital and an organism and capital and an organism and capital and an organism and capital and an organism. The antisense nucleic acids are useful and an organism and capital and an organism and capital and an organism and capital and an organism and capital and an organism and capital and an organ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              drug discovery programs, or for screening homologous nucleic acids required for proliferation in cells other than S. aureus, S. typhimurium, K. pneumoniae or P. aeruginosa. The present sequence is one of the target prokaryotic essential genes. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the wipo.int/pub/published_pct_sequences
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49.0%; Pred. No. 3.7e-17;
ive 0; Mismatches 590; Indels 33; Gaps
New antisense nucleic acids, useful for identifying proteins or scre
for homologous nucleic acids required for cellular proliferation to
isolate candidate molecules for rational drug discovery programs.
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                                                                                                                                                                                    Claim 14; SEQ ID NO 30488; 1766pp; English
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Novel polynucleotide comprising Bifidobacterium genome sequence useful as a probe or primer for detecting and/or identifying Bifidobacterium longum
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                                                                                                                                                                                                                                                           30-JAN-2001; 2001EP-00102050.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    in a biological sample.
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                                                                       EP1227152-A1,
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                                                                                                                                    31-JUL-2002
          Synthetic.
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                                                                                                                                                                             GATGCTGGGGGTGATGCCGGATCGAAGGACTCGACCAGCGT-----CGAACA
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CATGGACCACACATTGGACCACATCGGGCCCATCACCAGGGGGGGTCGAGCTCAACGCCCG
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requences given in ABO81842 and ABO81843, or a sequence exhibiting at least 90% identity or which hybridises with the sequence exhibiting at least 90% identity or which hybridises with the sequence given in ABO81843. Also described is a polynucleotide (II) encoding a fusion proced, comprising a sequence selected from 1097 sequences given in ABO85258 to ABO86554 ligated in frame to a polynucleotide encoding a certovities, and can be used as an inhibitor of Salmonella. (I) (which is a probe) is useful for the detection and/or identification of a probe) is useful for the detection and/or identification of a set of a probe) is useful for the detection and/or identification of a bilidobacterium longum NCC2705 (CNCM I-2618) can be used for preventing and/or treating diarrhoea brought about by pathogenic bacteria and/or rotavirus. The carrier is a food composition selected from ally, yogust, curd, cheese, fermenced milks, milk based fermented corrers, ice-creams, fermented cereal based products, milk based fermented covers, ince-creams, fermented cereal based products, milk based fermented covers, ince-creams, fermented cereal based products, milk based fermented covers, ince-creams, fermented cereal based products, milk based fermented covers, ince-creams, fermented cereal based products or wet tube feeding.

CC selected from tablets, liquid bacterial suspensions, dried oral supplement, wet oral supplement dry tube feeding or wet tube feeding.

CC (I) is useful in DNA arrays or chips to carry out analysis of the appression of the Bifidobacterium gene. ABO81844 to ABO81850 represent Bifidobacterium related nucleotide sequence given in the Sequence control in the printed Experisor of the present interpretation but is based on sequence information in the sequence of in the printed Experisor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   211170 GATGTGGCTCTCGAGCAGGCGACGCCTTCGACGCCAAGTCCGCCGAAGACAAGGCCGC 211111
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The present invention describes a polynucleotide (I) comprising a sequence of a Bifidobacterium genome selected from the nucleotide
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llarity 47.0%; Pred. No. 1.8e-16;
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Bifidobacterium longum NCC2705; Bifidobacterium; bacterial; antidiarrheic; antibacterial; inhibitor of Salmonella; detection; identification; lactic acid bacterium; diarrhoea; pathogenic bacteria; rotavirus; food composition; pharmaceutical composition; gene; ds.

Bifidobacterium longum

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GTGGAGCGGCTGCTCGCGGGCAGGCGCCACCATCGTCGGCAAGACGAACCTCGAGGACATG 459
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Halorubrum lacusprofundi

Archaea; Buryarchaeota; Halobacteria; Halobacteriales;

Halobacteriaceae; Halorubrum.

1 (bases 1 to 540)

Goo, Y., Roacch, J., Glusman, G., Baliga, N.S., Deutsch, K., Pan, M.,

DasSarma, S., Ng, W. V. and Hood, L.

Low-pass Sequencing for Microbial Comparative Genomics

Unpublished (2003)

Lostact: Goo Y

Institute for Systems Biology

Intl North 34th Street, Seattle, WA 98103, USA

Tel: 206 732 1412

Fax: 206 732 1299

Email: Ygoos@systemsbiology.org

Seq primer: M13 Forward

Class: shotgun:
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/note="Vector: pUC18; Site_1: Smal; A shotgun library
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                                                                         organism="Natrialba"
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/organism="Halorubrum lacusprofundi"
/mol type="genomic DNA"
/strain="ATCC 49239"
/db xref="texon:2247"
/clone lib="H1 pUC18 Library"
/note="Vector: pUC18; Site_1: Smal; A shotgun library
constructed from Halorubrum lacusprofundi genomic DNA
using pUC18/Smal/BAP plasmid"
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Natrialba asiatica
Natrialba asiatica
Archaea; Euryarchaecta; Halobacteria; Halobacteriales;
Halobacteriaceae; Natrialba.

1 (bases 1 to 600)
Goo,Y., Roach,J., Glusman,G., Baliga,N.S., Deutsch,K., Pan BasSarma,S., Ng,W.V. and Hood,L.
Low-pass Sequencing for Microbial Comparative Genomics Unpublished (2003)
Contact: Goo Y
Institute for Systems Biology
1441 North 34th Street, Seattle, WA 98103, USA
Tel: 206 732 1412
Fax: 206 732 1429
Email: ygoo@systemsbiology.org
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Pred. No. 6.9e-12;
0; Mismatches 186;
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/organism="Oryza sativa (japonica cultivar-group)"
/mol type="mRNA"
/mol type="mRNA"
/mol type="Nipponbare"
/db xref="texon:39947"
/clone="OSGNBG4H23"
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/dev stage="3 week"
/lab_host="DH10B"
/clone llb="OSGNBG"
/note="Vector: pBluescript II KS +; Site I: EcoRI; Site 2:
KhoI; 24 hrs after innoculation with Rice Blast (C9240-I)"
                                                                                                                                                  Zhou, B., Mazur, E.,
   Oryza sativa (japonica cultivar-group)

Bukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta, Spermatophyta; Viridiplantae, Streptophyta; Embryophyta; Tracheophyta; Bhrhartoldeae; Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryzae, Oryza
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.8%; Score 122.6; DB 14; Length 688; 58.7%; Pred. No. 2.7e-08;
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University of Arizona
Biological Sciences West, 448A, P.O.
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BACKWARD: gga aac agc tat gac cat g
Plate: 04 row: H column: 23
Seq primer: gta aaa cga cgg cca gtg.
Location/Qualifiers
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Matches 253; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             85721-0088, USA
Tel: 520 626 3967
Fax: 520 621 9288
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CB661518 CB661518 I GI:29665243
EST.
Oryza sativa (japonica cultivar-group)
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Contact: Dr. Sylvie Cloutier

Cereal Research Centre, Agriculture and Agri-food Canada
195 Dafoo Rd, Winnipeg, MB, Canada R37 2M9
191: (2004) 983-2340
Fax: (204) 983-4604
Email: scloutieredgar.gc.ca
was clonned directionally, not all sequences generated with reverse primer were from the 5' end (same with forward primer and 3' end).
Average insert size is -1.4 kb
Plate: 021 row: A column: 02
Seq primer: M13 Reverse.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db xref="caxon:4565"
/db xref="caxon:4565"
/clone="TaBl5021A02R"
/tisuuc Lype="developing seeds"
/dow stage="l5 days after anthesis"
/lab_host="E. coli DH10B"
/lab_host="E. coli DH10B"
/clone lib="TaBl5"
/note="Vector: pCWV-SPORT6.0 (Invitrogen Technologies);
Site_1: Not1; Site_2: Mlu1; mRNA obtained from wheat see of cultivar Glenlea 15 days post-anthesis"
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    .583
    /organism="Triticum aestivum"

                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/cultivar="Glenlea"
                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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                                                                                                                                   BE426574 STORES TA-JUL-2000 WHE0336_H04_P08ZS Wheat unstressed seedling shoot cDNA library Triticum aestivum cDNA clone WHE0336_H04_P08, mRNA sequence.
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US Department of Agriculture, Agriculture Research Service, Pacific
West Area, Western Regional Research Center
800 Buchanan Street, Albany, CA 94710, USA
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Bukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae,
Pooldeae; Triticeae; Triticum.

(Dasea I to 517)

Anderson, O.D., Chao, S., Choi, D.W., Close, T.J., Fenton, R.D.,
Han, P.S., Hsia, C.C., Kang, Y., Lazo, G.R., Miller, R., Rausch, C.J.,
Seaton, C.L. and Tong, J.C.
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Fax: 5105595978
Fax: 5105595818
Email: oandersnapw.usda.gov
Sequence have been trimmed to remove vector sequence and low quality sequence with phred score less than 20
Seq primer: Stratagene SK primer.
Location/Qualifiers
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/cultivar="Chinese Spring"
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/ Organishm="Ittlicum destryum"
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/ stee !: EcoR!; Site 2: Xho!; Seeds were
surface-sterilized, germinated and grown aseptically in
the dark at room temperature on filter paper with water,
nyetatin and cefotaxime in covered crystallization
dishes. Shoots were harvested and The tissue, total RNA, and
poly(A) RNA were preparature on MA library was made,
nyetatin and cefotaxime in covered crystallization
the cDNA clones were in vivo excised to give pBluescript
phagemids in the TJ Close lab (Choi, Close, Fenton) at the
University of Callifornia, Riverside. Plasmid DNA
preparations and DNA sequencing were performed in the OD
Anderson lab (all other authors)."
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US Department of Agriculture, Agriculture Research Service, Pacific
West Area, Western Regional Research Center
800 Buchanan Street, Albany, CA 94710, USA
Tel: $105595773
Tel: $105595818
Email: candersn@pw.usda.gov
Sequence have been trimmed to remove vector sequence and low
quality sequence with phred score less than 20
Seq primer: Stratagene SK primer.
Seq primer: Stratagene SK primer.
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[ (bases 1 to 636)
Anderson, O.D., Chao, S., Choi, D.W., Close, T.J., Fenton, R.D., Seaton, C.L., Haia, C.C., Kang, Y., Lazo, G.R., Miller, R., Rausch, C.J., The structure and function of the expressed portion of the wheat
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232 gcaccadedecarcaacecacacadedarcededadaaceceracaacarcaded
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HVCDNA0004 (Blumeria challenged) Hordeum vulgare subsp. vulgare
GDNA clone HV_CEMONOZMZZE, mRNA sequence.
BF562005.2 GI:13260083
EST.
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Hordeum vulgare subsp. vulgare
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Spermarophyta; Nagnoliophyta; Liliopsida; Poales; Poaceae;
Pooidaes; Triticaee; Hordeum.
1 (bases I to 857)
Wing, R., Close, T.J., Kleinhofs, A., Wise, R., Wei, F., Begum, D.,
Frisch, D., Yu, Y., Henry, D., Palmer, M., Rambo, T., Simmons, J.,
Choi, D. W., Fenton, R.D., Oates, R. and Main, D.
Development of a genetically and physically anchored EST resource
for barley genomics: Blumeria infected incompatible (Mial3)
Graphished (2001)
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Contact: Wing RA
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Clemson University
100 Jordan Hall, Clemson, SC 29634, USA
Tel: 864 656 7288
Fax: 864 656 4293
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Halobacteriaceae; Haloarcula.

I (bases 1 to 659)
Goo'Y., Roach,J., Glusman,G., Baliga,N.S., Deutsch,K., Pan DasSarma,S., Ng,W.V. and Hood,L.
Low-pass Sequencing for Microbial Comparative Genomics
Unpublished (2003)
Contact: Contact: Contact: Contact: Contact: 1206 732 1412
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1441 North 34th Street, Seattle, WA 98103, USA
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Seg primer: M13 Forward
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CUB/4694 S3S bp mRNA linear BST 11-JUL-2003
AZO3.102N04F011001 AZO3 Triticum aestivum cDNA clone AZO3102N04,
mRNA sequence.
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7.1%; Score 112.4; DB 14; Length
Best Local Similarity 60.1%; Pred. No. 7.7e-07;
Matches 226; Conservative 0; Mismatches 141; Indels
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    /organism="Triticum aestivum"

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library HVcDMA0004 (Blumeria challenged)"
//note="Vector: lambdaZAP; Site=1: ECORI; Site=2: XhO1;
C.I. 16155 (Mla13) Plants were greenhouse grown in the R Wise lab at Iowa State University, Ames, IA; 7 day old green seedlings were challenged with isolate A2?
(AvYMla13) of Blumeria graminis f. sp. hordei, and leaves were harvested 20 and 24 hr post-incculation and snap frozen; uninoculated leaves were harvested 20 hr post-incculation (Wei, Wise). In the TJ Close lab at the University of California, Riverside, total RNA was prepared from each sample pool, equal quantities of all three RNA pools were combined, poly(A) RNA was purified from the mixture, one cDNA library was made, and I million pfu were in vivo excised to give pBluescript SK(-) cDNA phagemids (Choi, Close). Phagemids Were plated and picked at the Clemson University Genomics Institute (CUGI) (Begum, Palmer, Frisch, Atkins and Wing). Plasmid DNA preparations, DNA sequencing and sequence analysis were parformed at CUGI (Wing, Yu, Frisch, Henry, Simmons, Oates, Rambo, Main). The sequence has minimum of 100 bases or proparations and made on trimmed to remove vector sequence and contains a minimum of proparations.
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                                                                                                                                                                                             organism="Hordeum vulgare subsp. vulgare"
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lab host="TJC121"
                                                                                                                                                                                                                                                         mol_type="mRNA"
cultivar="C116155 (Mla13)"
                                                                                                                                                                                                                                                                                                                                                                                   sub_species="vulgare"
db_xref="taxon:112509"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             clone="HV CEa0002M22f"
High quality sequence stop: 509
Location/Qualifiers
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BJ_Ba0003B03f_B. japonicum BAC library Bradyrhizobium japonicum GAS2518188
AZ935188.1 GI:13777512
                                                                                                                                                                                                                                                                                                                                                            Bradyrhizobiaceae; Bradyrhizobium.
(Lbases 1 to 604)
Towkins,J.P., Wood,T.C., Stacey,M.G., Loh,J.T., Judd,A.,
Goicoechea,J.L., Stacey,G., Sadowsky,M.J. and Wing,R.A.
A marker-dense, sequence-ready map of the Bradyrhizobium japonicum
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69 TIGCGGICGCGGCGAIGGIAACGCIGGCGCACGGCACCGAITICGGCGGCTCGGIGC 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          390 TGCCGTGGTGGAGCGGCTGCTCGCGGCAGGCGCCCACCATCGTCGGCAAGACGAACCT
                                                                                                                                                                                                                                                                                                  Bradyrhizobium japonicum
Bradyrhizobium japonicum
Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol type="genomic DNA"
/strain="USDA110"
/db_xref="taxon:375"
/lab_host="E; coli"
/clone llb="B, japonicum BAC library"
/note="Vector: pIndigo536; Site_1: HindIII"
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53.1%; Pred. No. 4e-06;
iive 0; Mismatches 239; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Bradyrhizobium japonicum"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Wing RA
Clemson University Genomics Institute
Clemson University
100 Jordan Hall, Clemson, SC 29634, USA
Tel: 864 656 4288
Fmail: rwing@clemson.edu
Class: BAC ends
High quallity sequence stop: 553.
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21376150
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Bradyrhizobium japonicum
Bacteria; Proteobacteria; Alphaproteobacteria; Rhizobiales;
Bradyrhizobiaceae, Bradyrhizobium.
1 (baess 1 to 640)
Tomkins, J.P., Wood, T.C., Stacey, M.G., Loh, J.T., Judd, A., Goicoechea, J.L., Stacey, G., Sadowsky, M.J. and Wing, R.A.
A marker-dense, sequence-ready map of the Bradyrhizobium japonicum
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/lab_bost="E, coli"
/clone_lib="B, japonicum BAC library"
/note="Vector: pIndigo536; Site_l: HindIII"
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Clemson University Genomics Institute
Clemson University
100 Ozordan Hall, Clemson, SC 29634, USA
Tel: 864 656 7288
Fox: 864 656 4293
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High quality sequence stop: 582.
Location/Qualifiers
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Class: BAC ends
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Towkins, J. P., Wood, T. C., Stacey, M.G., Loh, J.T., Judd, A.,
Goicoechea, J.L., Stacey, G., Sadowsky, M.J. and Wing, R.A.
A marker-dense, sequence-ready map of the Bradyrhizobium japonicum
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Email: rwings 1235
Email: rwingsclemson.edu
Class: BAC ends
High quality sequence stop: 482.
Location/Qualifiers
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/clone lib="%.japonicum BAC library"
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100 Jordan Hall, Clemson, SC 29634, USA
121: 864 656 7288
Fax: 864 656 4293
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BG300285 517 bp mRNA linear EST 22-OCT-2001
HVSDMED6011P07f Hordeum vulgare seedling shoot EST library
HVCDNA0002 (Dehydration stress) Hordeum vulgare subsp. vulgare cDNA
clone HVSMED0011P07f, mRNA sequence.
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Hordeum vulgare subsp. vulgare
Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticaee; Hordeum.
1 (basea; 1 to 517)
Wing, R., Close, T.J., Kleinhofs, A., Wise, R., Begum, D., Frisch, D.,
Yu, Y., Henry, D., Palmer, M., Rambo, T., Simmons, J., Choi, D.W.,
Penton, R.D., Oates, R. and Main, D. Simmons, J., Choi, D.W.,
Development of a genetically and physically anchored EST resource
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                                                                                                                                                   317 ACTGCATCGCCATCGCCGGTATGCCCCACCACGGGTCCCGGATGCTCCCGACTGTGA
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/organism="Hordeum vulgare subsp. vulgare"
/oultivar="Morex"
/sultivar="Morex"
/sub_species="vulgare"
                                                                           Indels
                                   Score 106; DB 28;
Pred. No. 7e-06;
0; Mismatches 155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Wing RA
Clemson University Genomics Institute
Clemson University
100 Uordan Hall, Clemson, SC 29634, US
Tal: 864 656 7288
Fax: 864 656 4293
Email: rwing@clemson.edu
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High quality sequence stop: 438.
Location/Qualifiers
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Total hq bases = 213
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BU BA0002A21r B. japonicum BAC library Bradyrhizobium japonicum
Genomic, genomic survey sequence.
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I (bases Lo 672)
Tomkins, J.P., Wood,T.C., Stacey,M.G., Loh,J.T., Judd,A.,
Golicoechea,J.L., Stacey,G., Sadowsky,M.J. and Wing,R.A.
A marker-dense, sequence-ready map of the Bradyrhizobium japonicum
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                                                                                                                                                                                                                                                                                                                                                                                                               627 ATGGTGCGGACTGGTCGCCATGAAGGCGACCCACGGCCTGGTGCCGTCTTACGGCCTGAC 686
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                                                        GCTGGGCTTTCCGACCACG---GCGGCCTGCCCGGCTTCTCCTACACACCGACCCATGA 127
                330 CGCCGGTATGCCCCACCACGAACGGGTCCCCGATGCTCCCGACTGTGATCGCCACCGAGGA 389
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                                                                                                                                                                          CGAGGACATGGCGATGGG---TATCGGTGAAGGCAGCGTCTACGGTCCTGCGCTGAACCC
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                                                                                              TGCCGTGGTGGAGCGGCTGCTCGCGGCAGCGCCCACCATCGTCGCCAAGACGT
                                                                                                                       CTCGACCGCGGTGGAGCGCCTGCGCGCGCGCGCCATCATCATCGGCAAGACCAATCT
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/strain="USDA110"
/db.xref="texon:375"
/db.bost="B. coli"
/clone lib="B. japonicum BAC library"
/note="Vector: pindigo536; Site_1: HindIII"
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/organism="Bradyrhizobium japonicum"
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100 Jordan Hall, Clemson, SC 29634, USA
Tel: 864 656 1288
Fax: 864 656 4293
Email: rwing@clemson.edu
Class: BAC ends
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/dlone lib="Horderm vulgare seedling shoot EST library
HVCDNAQ002 (Dehydration stress)"
//dlone lib="Horderm vulgare seedling shoot EST library
HVCDNAQ002 (Dehydration stress)"
//note="Vector: lambdaZAP; Site 1: ECOR1; Site 2: Xho1;
Seeds were surface sterilized then germinated under axenic
conditions in the dark at room temperature on filter paper
with water, nystatin and cefotaxime in covered
crystallization dishes. Five-day old seedlings were
incubated at 90; RH for 24 hr. Shoots were then harvested,
total RNA was prepared, poly(A) RNA was made, 600000 pfu were
primary unamplified cDNA library was made, 600000 pfu were
in vivo excised to give pBluescript SK(-) cDNA phagemids.
These steps were performed in the TJ Close laboratory at
the University of California, Riverside (Choi, Close,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Penton). Phagemids were plated and picked at the Clemson University Genomics Institute (CUGI) (Begum, Palmer. Frisch, Atkins and Wing). Plasmid DNA preparations, DNA sequencing and sequence analysis were performed at CUGI (Wing, Yu, Frisch, Henry, Simmons, Oates, Rambo, Main). The sequence has been trimmed to remove vector sequence and contains a minimum of 100 bases of phred value 20 or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               http://www.gendome.clemson.edu/projects/barley. To order this clone see http://www.genome.clemson.edu/orders Also see Close TJ, Wing R, Kleinhofe A, Wise R (2001) Genetically and physically anchored EST resources for barley genomics. Barley Genetics Newsletter 31:29-30. (http://wheat.pw.usda.gov/ggpages/bgn/31/cover.html)"
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tissue_type="Seedling shoot"
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Matches 226; Conservative
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Sequence 10, Appl
Sequence 9752, Ap
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1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
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US-08-539-666-1
3 US-09-103-840A-2
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Sequence 20, Application US/08726136

Patent No. 581286

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Patent No. 581286

Patent No. 581286

Patent No. 581286

Patent No. 581286

Patent Nark S. Payne

APPLICANT: MARK J. PALLON

PATILE OF INVENTION: THE PRODUCTION OF CHIRAL ANIDES ENZYMES AND

TITLE OF INVENTION: RECOMBINANT ORGANISMS EXPRESSING THOSE SIZE

TITLE OF INVENTION: RECOMBINANT ORGANISMS AND ANIDES AND ANIDES

TITLE OF INVENTION: RECOMBINANT ORGANISMS AND COMPANY

TITLE OF INVENTION: RECOMBINANT ORGANISMS AND COMPANY

STREET: 1007 MARKET STREET

COUNTRY: UNITED STATES OF AMERICA

STREET: 1007 MARKET STREET

COUNTRY: UNITED STATES OF AMERICA

STREET: 1809 PC COMPATIBLE

COMPUTER: INVENTION NUMBER: US/08/726,136

FILING DATE: OCCOMBATIBLE

COMPANIENT NUMBER: 60/064914

FILING DATE: OCCOMBATION:

PRIOR APPLICATION NUMBER: 60/064914

FILING DATE: MORENER: 33,628

PRIOR APPLICATION NUMBER: 33,628

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PRIOR STATE INVENTION NUMBER: 33,628

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PRIOR PROPERTY NUMBER: 33,628

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PRIOR PROPERTY NUMBER: 33,628

PRIOR PROPERTY NUMBER: 60,624314

PREPRENCEDION NUMBER: 93,6277
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1186, Ap
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US-09-252-991A-7653

US-09-252-991A-7738

US-09-252-991A-7738

US-08-26-136-27

US-08-76-136-27

US-09-103-434-27

US-09-687-594-27

US-09-361A-27

US-09-361A-23

US-08-361A-12

US-08-361A-12

US-08-361A-12

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US-09-138-452A-1

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US-09-107-532A-308
US-08-743-168B-42
US-08-743-168B-44
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REPERENCE/DOCKET NUMBER: CR-2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-892-8112
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
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TYPE: nucleic acid
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US-09-103-434-20
; Sequence 20, Application US/09103434
Patent No. 6133421
; GENERAL INFORMATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
COMPUTER: IBM CCOMPATIBLE
OPERATING SYSTEM: MICROSOFT WIS
SOFTWARE: MICROSOFT WORD 2.0C
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APPLICATION NUMBER: 60/004914
FILING DATE: OCTOBER 6, 1995
ATTORNEY/AGENT INFORMATION:
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INFORMATION FOR SEQ ID NO:
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APPLICATION NUMBER:
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ADDRESSEE: E. I. DU
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CLASSIFICATION:
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APPLICANT: MARK S. PAYNE
APPLICANT: MARK J. NELSON
TITLE OF INVENTION: NUCLEIC ACID FRAGMENTS ENCODING
TITLE OF INVENTION: STEREOSPECIFIC NITRILE HYDRATASI
TITLE OF INVENTION: RECOMBINANT ORGANISMS EXPRESSING
TITLE OF INVENTION: THE PRODUCTION OF CHIRAL AMIDES
NUMBER OF SEQUENCES: 28
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APPLICATION NUMBER: US/09/103,434
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APPLICANT: ROBERT D. FALLON
APPLICANT: MARK S. PAYNE
APPLICANT: MARK J. PAYNE
APPLICANT: MARK J. PALSON
TITLE OF INVENTION: NUCLEIC ACID FRAGMENTS ENCODING
TITLE OF INVENTION: STEREOSPECIFIC NITRILE HYDRATASE AND AMIDASE ENZYMES AND
TITLE OF INVENTION: THE PRODUCTION OF CHIRAL AMIDES AND ACIDS
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STREET: 1007 MARKET STREET
CITY: WILMINGTON
STATE: DELAWARE
COUNTRY: UNITED STATES OF AMERICA
ZIP: 19898
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Patent No. 6251650
GENERAL INFORMATION:
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MEDIUM TYPE: FLOPPY DISK
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                                                                                                                                                                                                                                                                                             Length 1521,
                                                                                                                                                                                                                                                                                          Score 224.8; DB 3; Length
Pred. No. 7.8e-35;
0; Mismatches 752; Indels
                                                             TYPE: nucleic acid
STRANDENNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                      14.2%;
   SEQUENCE CHARACTERISTICS:
LENGTH: 1521 base pairs
TYPE: nucleic acid
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Matches 731; Conservative
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us-10-658-691-4.rni

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STATE: DC
COUNTRY: USA
ZIP: 20005-3315
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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Pred. No. 7.8e-35;
0; Mismatches 752;
                                                                                                     CR-9677
                   NAME: FLOYD, LINDA A.
REGISTRATION NUMBER: 33,692
REFRENCE/DOCKET NUMBER: CR-96
TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-8012
TELEPHONE: 302-773-0164
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 1521 base pairs
TYPE: nucleic acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: No
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Best Local Similarity 48.8%;
Matches 731; Conservative
ATTORNEY/AGENT INFORMATION:
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Sequence 1. Application US/08539666

| Sequence 1. Application US/08539666
| Patent No. 576518
| GENERAL INFORMATION:
| APPLICANT: Petre, Dominique
| APPLICANT: Cerbelaud, Edith
| APPLICANT: Wayaux, Jean-Francois
| APPLICANT: Web, Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Five Patrice | Farabow, Garrett & ADDRESSEE: Dunner | Farabow, Garrett & STREET: 1300 I Street, N.W.
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Patent No. 6294328
GENERAL INPORMATION:
PAPLICANT: FLEISCHMAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: PRASER, Claire M.
APPLICANT: PRASER, Claire M.
TITLE OF INVENTION: TUBERCULOSIS
TITLE OF INVENTION: TUBERCULOSIS
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Pred. No. 2.2e-26;
0; Mismatches 742; Indels
                                               Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 03715.0010-01000
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                 SOFTWARE: Patentin Release #1.0, Ver.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/539,666
FILING DATE: US/08/539,666
CLASSIFFCATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/097,009
FILING DATE: 27-UU-1993
APPLICATION NUMBER: US 07/612,673
FILING DATE: 14-NOV-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PRESIDENCY PATORNEY, APPLICATION DATA:
APPLICATION NUMBER: R 8916332
FILING DATE: 11-DEC-189
ATTORNEY/AGENT INFORMATION:
NAME: POLICET, JAIN E.R.
REGISTRATION NUMBER: 33,332
PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
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Best Local Similarity 49.1%;
Matches 704; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 202-408-4400
INFORWATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 1879 base pairs
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STRANDEDNESS: single
    OPERATING SYSTEM:
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Pred. No. 4.4e-24;
0; Mismatches 621;
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APPLICANT: FRASER, COUN C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAI
FILE REPERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
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Best Local Similarity 48.9
Matches 623; Conservative
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US-09-103-840A-1
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US-09-103-840A-2
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Pred. No. 1.5e-24;
2; Mismatches 619;
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SORTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 48.9%;
Matches 623; Conservative
                                                                                                                                                                                                                                   LENGTH: 4403765
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APPLICANT: Cerbelaud, Edith
APPLICANT: Cerbelaud, Edith
APPLICANT: Mayaux, Jean Francois
APPLICANT: Yeb, Patrice
TITLE OF INVENTION: NOVEL POLYPEPTIDES, THE DNA SEQUENCES
TITLE OF INVENTION: UTILIZATION
TITLE OF INVENTION: UTILIZATION
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/612,673
FILING DATE: 19901114
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Patent No. 5260208
GENERAL INFORMATION:
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REPERENCE/DOCKET UNBER: 03
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 408-4000
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1520 TCGAGGCCGCCGGC 1533
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NAME: Potter, Jane E.R.
REGISTRATION NUMBER: 33,
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INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
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CLASSIFICATION:
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STREET: 13
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ZOMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC COMPATION COMPUTER: IBM PC COMPATION SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/07/796,361A FILING DATE: 19911122 CLASSIFICATION NUMBER: FR 90-14 853 FILING DATE: 28-NOV-1990 ATTORNEY/AGENT INFORMATION: NAME: CRANE-FEURY, SHARON E. REGISTRATION NUMBER: 936,113 REFERENCE/POCKET NUMBER: 936,113 REFERENCE/POCKET NUMBER: 936,113 REFERENCE/POCKET NUMBER: 936,113 REFERENCE/POCKET NUMBER: 936,113 REFERENCE/POCKET NUMBER: 936,113 REFERENCE/POCKET NUMBER: 936,113 REFERENCE/POCKET NUMBER: 003025-010
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APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: ARRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: ABRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR PILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NOS 9752
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Pred. No. 1.1e-20;
0; Mismatches 590; Indels
                                                                                                   TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-10084
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 49.0%;
Matches 598; Conservative
       33142
       NOS:
) NUMBER OF SEQ ID
) SEQ ID NO 10084
) LENGTH: 1818
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US-09-252-91A-10084/c

US-09-252-91A-10084/c

Sequence 10084, Application US/09252991A

Patent No. 6551795

GENERAL INFORMATION:

APPLICANT: Marc O' Rubenfield et al.

APPLICANT: Marc O' Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS;

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: 107196.136

CURRENT APPLICATION NUMBER: US 60/074,788

PRIOR APPLICATION NUMBER: US 60/074,788

PRIOR APPLICATION NUMBER: US 60/094,190

PRIOR FILING DATE: 1999-02-18

PRIOR FILING DATE: 1998-07-27
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Pred. No. 4.6e-15;
0; Mismatches 266;
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APPLICANT: FLEISCHMAN, Robert D.
APPLICANT: FLEISCHMAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: WRYER, Claire M.
APPLICANT: WRYER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT APPLICATION NUMBER: US/09/103,840A
SOFTWARE: PatentIn Ver: 2.1
SOFTWARE: PatentIn Ver: 2.1
LENGTH: 4411529
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ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1
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Best Local Similarity 53.2%;
Matches 309; Conservative
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OTHER INFORMATION: "n" bases at various positions throughout the sequence
OTHER INFORMATION: represent a, t, c or g
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Pred. No. 4.6e-15;
0; Mismatches 266;
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APPLICANT: WHITE, Owen R.
APPLICANT: FERSER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN.
ITILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT PILING BATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Ver. 2.1
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Patent No. 6294328
GENERAL INFORMATION:
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LENGTH: 4403765
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US-09-103-840A-2
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                                                                                                                                                                          614 GGATCCCGGCCGCATGGTGCGGACTGGTCGGCATGAAGGCGACCCACGGCCTGGTGCCGT
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Best Local Similarity 47.9
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US-08-463-470-8
         US-08-233-146-8
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2644900 CCGCAGCATGGACACCTAGTGGGCATCAAGCCACAACGCGGGTCCGGATCTCCACCTGG 2644959
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APPLICANT: YAMADA, HIDEAKI
APPLICANT: YAMADA, HIDEAKI
APPLICANT: YAMADA, HIDEAKI
APPLICANT: NGASSAWA, TOW
APPLICANT: NISHTYAMA, MAKOTO
TITLE OF INVENTION: A GENE ENCODING A POLYPEPTIDE HAVING
TITLE OF INVENTION: NITRLE HYDEATASE ACTIVITY, A TRANSFORMANT CONTAINING TITLE OF INVENTION: TRANSFORMANT
TITLE OF INVENTION: TRANSFORMANT
TITLE OF INVENTION: TRANSFORMANT
WUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                               798
                                                                                         GGCCTGACATACATGGACCACACTTGGACCACATCGGGCCCATCACCAGGGGGGTCGAG
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MEDIUM TYPE Flopy disk

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

COMPUTER: IBM PC compatible

SECTIANG SYSTEM: PC-DOS/MS-DOS

CONTARRE: PEPELICATION DATA:

APPLICATION NUMBER: US 07/694,746

FILING DATE: 02-MAY-1991

ATTORNEY/AGENT INFORMATION:

NAME: MISROCK, S. LESLIE

REGISTRATION NUMBER: 18,872

REFERENCE/DOCKET NUMBER: 18,872

REFERENCE/DOCKET NUMBER: 18,872

REFERENCE/DOCKET NUMBER: 18,872

REFERENCE/DOCKET NUMBER: 18,872

REFERENCE/DOCKET NUMBER: 18,974

INFORMATION FOR SEQ ID NO: 8:

SEQUENCE CHARACTERISTICS:

LENGTH: 2456 bese pairs

TYPE: nucleic acid

TYPE: nucleic acid

TYPE: NUCLEICATION

TOTALE ACID NO: 8:

SEQUENCE CHARACTERISTICS:

LENGTH: 2456 bese pairs

TYPE: nucleic acid

TYPE: NUCLEIC ACID

TOTALE ACID NO: 8:

TYPE: NUCLEIC ACID

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STREET: 1155 AVENUE OF THE AMERICAS
CITY: NEW YORK
STATE: N.Y.
COUNTRY: U.S.A.
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Patent No. 5648256
GENERAL INFORMATION:
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LOCATION:
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NAME/KEY:
LOCATION:
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US-08-233-146-8
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Sequence 15844 Application US/09252991A
Sequence 15844 Application US/09252991A
Patent No. 6551705
Patent No. 6551705
Patent No. 6551705
Patent No. 6551705
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
LENGTH: 1335
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APPLICANT: YAMADA, HIDBAKI
APPLICANT: NAGASAWA, TSUBHARU
APPLICANT: NAGHYAMA, MAKOTO
TITLE OF INVENTION: GENE AND A POLYPEPTIDE HAVING
TITLE OF INVENTION: TRANSFORMANT
TITLE OF INVENTION: TRANSFORMANT
TITLE OF INVENTION: TRANSFORMANT
TITLE OF INVENTION: GENE AND A PROCESS FOR THE PRODUCTION OF AMIDES USING THE
NUMBER OF SEQUENCES: 8
CORRESPONDENCES: 8
CORRESPONDENCES: B
TORRESPONDENCE ADDRESS:
STREET: 1155 AVENUE OF THE AMERICAS
CITY: NEW YORK
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STRAIN: B23 (FERM BP-187)
        8, Application US/08463470
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MOLECULE TYPE: DNA (genomic)
ORIGINAL SOURCE:
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TYPE: nucleic acid
STRANDEDNESS: single
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LOCATION: 1021..1620
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             Sequence 8,
Patent No.
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Best Local Similarity 52.7%; Pred. No. 1.1e-13;
Matches 280; Conservative 0; Mismatches 239; Indels 12; Gaps
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; TYPE: DNA
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| CURRENT: Kayser, Kevin J.
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| PRIOR FILING DATE: 2002-09-10
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Pred. No. 3.8e-40;
0; Mismatches 615;
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APPLICANT: SHIRAWA, HIROSHI
APPLICANT: SHIRAWA, HIROSHI
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: HATTORI, MASHIRA
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REPERBNCE: 249-262
CURRENT FILING DATE: 2002-05-29
PRIOR APPLICATION NUMBER: JP 2001-204089
PRIOR FILING DATE: 2001-05-30
PRIOR PILING DATE: 2001-05-30
PRIOR PILING DATE: 2001-05-30
SEQ ID NO 1
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                                                     Sequence 1, Application US/10156761
Publication No. US20030119018A1
GENERAL INFORMATION:
APPLICANT: OMURA, SATOSHI
APPLICANT: IKEDA, HARUO
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Best Local Similarity 50.1
Matches 641; Conservative
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Pred. No. 3.9e-32;
); Mismatches 613;
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/230,335
PRIOR FILING DATE: 2000-09-06
PRIOR FILING DATE: 2000-09-06
PRIOR FILING DATE: 2000-09-09
PRIOR PRILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/24,578
PRIOR FILING DATE: 2000-10-23
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/25,931
PRIOR FILING DATE: 2000-12-27
PRIOR PILING DATE: 2000-12-27
PRIOR FILING DATE: 2000-12-27
PRIOR FILING DATE: 2000-12-27
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PRIOR FILING DATE: 2001-2-16
PRIOR FILING DATE: 2010-2-09
PRIOR FILING DATE: 2010-2-09
PRIOR FILING DATE: 2010-2-09
PRIOR FILING DATE: 2010-2-16
PRIOR PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2010-2-16
PRIOR APPLICATION NUMBER: 60/269,308
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PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2010-2-16
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Best Local Similarity 49.6
Matches 636, Conservative
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CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 2003-20-20
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APPLICANT: Zamdio, Carlos
APPLICANT: Amalone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John
APPLICANT: Trawick, John
APPLICANT: Trawick, John
APPLICANT: Trawick, John
APPLICANT: Yamamoto, Robert
APPLICANT: Forsyth, R.
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US-10-282-122A-26120
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                                                                           APPLICANT: Xu, H.

TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REPERDICE: ELITRADASA
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT FILING DATE: 200--02-20
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR PILING DATE: 2000-03-21
PRIOR PLING DATE: 2000-03-078
PRIOR PLING DATE: 2000-03-078
BB2 ACTGGAGCCGAACGGTGCG----ACGCCGGACGTGATCGCCGCGTTCAACCAGGGACT
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APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
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APPLICANT: Tyskind, Judith
APPLICANT: Tyskind, Judith
APPLICANT: Trawick, John
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APPLICANT: Zamudio, Carlos

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APPLICANT: Malone, Cheryl

APPLICANT: Malone, Kabert

APPLICANT: Olisen, Kai

APPLICANT: Tawick, John

APPLICANT: Tawick, John

APPLICANT: Yamamoto, Robert

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APPLICANT: Yamamoto, Robert

APPLICANT: Yu, H.

APPLICANT: Yu, H.

APPLICANT: Xu, H.

APPLICANT: Korsyth, R.

APPLICANT: Korsyth, R.

APPLICANT: Xu, H.

APPLICANT: Number: 0010-02-20

PRIOR FILING DATE: 2000-03-21

PRIOR FILING DATE: 2000-03-21

PRIOR FILING DATE: 2000-05-26

PRIOR FILING DATE: 2000-05-26

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                                                                                                                                                                                                                              Sequence 28642, Application US/10282122A Publication No. US20040029129A1 GENERAL INFORMATION:
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APPLICANT: NUMBER: US/10/262,122A
CURRENT FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR FILING DATE: 2000-05-23
PRIOR PLICATION NUMBER: 60/207,727
PRIOR APPLICATION NUMBER: 60/207,727
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PRIOR FILING DATE: 2000-09-09

PRIOR PULING DATE: 2000-10-23

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PRIOR APPLICATION NUMBER: 60/253,625

PRIOR PILING DATE: 2000-11-27

PRIOR PEDICATION NUMBER: 60/257,931

PRIOR PEDICATION NUMBER: 60/257,931

PRIOR PILING DATE: 2000-12-22

PRIOR PILING DATE: 2001-02-09

PRIOR PILING DATE: 2001-02-09

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR PILING DATE: 2001-02-06

PRIOR PILING DATE: 2001-02-06

PRIOR APPLICATION NUMBER: 60/269,308

PRIOR PILING DATE: 2001-02-16

SROFTMARE: PATEUTH VERSION 3.1

SEQ ID NO 14078

LENGTH: 1488
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Pred. No. 2.1e-26;
Mismatches 590; Indels
                   SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7924
LENGTH: 1455
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                                                                                                                                                                                                                                                        ORGANISM: Pseudomonas aeruginosa
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Best Local Similarity 49.0%;
Matches 598; Conservative
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US-09-815-242-7924
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APPLICANT: Oblean, Kari L.
APPLICANT: Syskind, Judith W.
APPLICANT: Tranick, John D.
APPLICANT: Tranick, John D.
APPLICANT: Tranick, John D.
APPLICANT: Tranick, John D.
APPLICANT: Tranick, John D.
APPLICANT: Yamamoto, Robert T.
APPLICANT: Yamamoto, Robert T.
APPLICANT: Yamamoto, Robert T.
APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: ELITRA, 011A
CURRENT FILING DATE: 2000-03-21
FRIOR APPLICATION NUMBER: 60/201, 078
FRIOR APPLICATION NUMBER: 60/206, 848
FRIOR FILING DATE: 2000-05-23
FRIOR FILING DATE: 2000-05-23
FRIOR FILING DATE: 2000-10-23
FRIOR FILING DATE: 2000-10-23
FRIOR APPLICATION NUMBER: 60/242, 578
FRIOR FILING DATE: 2000-11-27
FRIOR APPLICATION NUMBER: 60/285, 931
FRIOR FILING DATE: 2000-12-22
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Patent No. US20020061569A1
GENERAL INFORMATION:
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APPLICANT: Ohlsen, Kari L.
APPLICANT: Syskind, Judith W.
APPLICANT: Wall, Daniel
APPLICANT: Trawick, John D.
APPLICANT: Yamanco, Rezert T
APPLICANT: Yamanco, Robert T
APPLICANT: Xumenco, Robert T
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                                                                                                                                                                      Length 1455;
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                                                                                                                                                                Query Match
9.6%; Score 151; DB 13;
Best Local Similarity 49.0%; Pred. No. 2.1e-26;
Matches 598; Conservative 0; Mismatches 590;
; ORGANISM: Pseudomonas aeruginosa
US-10-282-122A-30488
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APPLICANT: Carr, Grand
APPLICANT: Forsyth,
APPLICANT: Forsyth,
TILE REPERENCE: ELITRA,034A
CURRENT ADPLICATION NUMBER: US/10/282,122A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT APPLICATION NUMBER: 60/191,078
PRIOR PILING DATE: 2000-05-23
PRIOR PILING DATE: 2000-05-23
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PRIOR PILING DATE: 2000-05-23
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PRIOR PAPLICATION NUMBER:
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                                                             GATCGCGGAGCACCTGCGCGACGAATACCTCGGCATCCACTACGCGAAGGCGCAGAACCT
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Ohlsen, Kari
Ohlsen, Kari
Wall, Daniel
Trawick, John
Carr, Grant
Yamamoto, Robert
Forsyth, R.
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APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
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APPLICANT: AU, H.,

TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
FILE REFERENCE: ELITRA.034A
CURRENT APPLICATION NUMBER: US/10/282,122A
CURRENT APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR PLILING DATE: 2000-05-23
PRIOR PLILING DATE: 2000-05-24
PRIOR PLILING DATE: 2000-05-26
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PRIOR PLILING DATE: 2000-09-09
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PRIOR PLILING DATE: 2000-10-23,625
PRIOR APPLICATION NUMBER: 60/233,625
PRIOR PLILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/253,635
PRIOR PLILING DATE: 2000-12-22
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                                                                               Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 78614 SOFTWARE: PatentIn version 3.1
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Carr, Grant
Yamamoto, Robert
Forsyth, R.
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APPLICANT: Zamudio, Carlos
APPLICANT: Malone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
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Wall, Daniel
Trawick, John
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                                                                               1290 CCCGACCACGCCTACCGTTGCCAACGAGCTGTTGAGCGGTCGGCAAGACACCATGTCCAT 1349
                                                                                                                                                                    1197 CCCGACCACGCCGAACCCGGCCTGGAAGATCGGCGAGAAGAACGACGACGACCGGTTTCCCA 1256
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                                                                                                                                                                                                                                                             1350 GATCCCACGGATGACGGGCAATGCGATCCTCAACACGTGCCCGGCTGGACCTCACCGGTCA
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9.0%; Score 142.6; DB 15; Length:
Best Local Similarity 54.5%; Pred. No. 2e-24;
Matches 286; Conservative 0; Mismatches 239; Indels
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Sequence 7248, Application US/10156761

Sequence 7248, Application US/10156761

Sequence 7248, Application US/10156761

Sequence 7248, Application US/10156761

Septicant inference 10.8

APPLICANT: CHEDA, HAROO

APPLICANT: ISHIRAM, HIROSHI
APPLICANT: SHIRAM, HIROSHI
APPLICANT: SHIRAM, HIROSHI
APPLICANT: SATAKI, YOSHIVUKI

APPLICANT: SATAKI, YOSHIVUKI

APPLICANT: SATAKI, YOSHIVUKI

TITLE OF INVENTOR! NAVEL POLYNUCLEOTIDES

TITLE OF INVENTOR! NOVEL POLYNUCLEOTIDES

CURRENT PILING DATE: 2002-05-29

PRIOR FILING DATE: 2001-05-30

PRIOR FILING DATE: 2001-05-30

PRIOR APPLICATION NUMBER: UP 2001-272697

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; NAME/KEY: CDS
; LOCATION: (1)..(1362)
US-10-156-761-7248
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176 TCGCGCGCGCGCGCGCGCGCTGACCGGCCTGCCGATCGCGCACAAGGACGTGTTCG 235

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; Sequence 15096, Application US/10282122A; Publication No. US20040029129A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                           APPLICANT: Wang, Liangsu
APPLICANT: Zamudio, Carlos
APPLICANT: Manone, Cheryl
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Zyskind, Judith
APPLICANT: Trawick, John
APPLICANT: Trawick, John
APPLICANT: Carr, Grant
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US-10-282-122A-15096
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SEQ ID NO 15096
LENGTH: 1536
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Forsyth, R.
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APPLICANT: Xu, H.
APPLICANT: Xu, H.
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms FILE REFERENCE: ELITEA.034A
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PRIOR PILING DATE: 2000-05-23
PRIOR PILING DATE: 2000-05-26
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PRIOR APPLICATION NUMBER: 60/242,578
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                                                                       Length 1449;
                                                                       DB 13;
                                                                 Query Match 8.9%; Score 140.6; DB 13; Best Local Similarity 49.0%; Pred. No. 6e-24; Matches 498; Conservative 0; Mismatches 504;
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Publication No. US20040029129A1
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APPLICANT: Zamudio, Carlos
APPLICANT: Zamudio, Carlos
APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari
APPLICANT: Chisen, Judith
APPLICANT: Tawick, Judith
APPLICANT: Tawick, John
APPLICANT: Tawick, John
APPLICANT: Tawick, John
APPLICANT: Tawick, John
APPLICANT: Carr, Grant
APPLICANT: Carr, Grant
APPLICANT: Carr, Grant
APPLICANT: Fowerth
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, ORGANISM: Pseudomonas putida
US-10-282-122A-31392
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7.9%; Score 125.4; DB 15; Length 1398;
Best Local Similarity 53.9%; Pred. No. 2.4e-20;
Matches 280; Conservative 0; Mismatches 236; Indels 3;
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; Publication No. US20030186423A1
; CENERAL INFORMATION:
APPLICANT: VERSECK, STEFAN
; APPLICANT: BOWARIUS, ANDREAS
APPLICANT: BOWARIUS, ANDREAS
APPLICANT: RUIMA, WARIA-REGINA
APPLICANT: RUISC, LUTZ
APPLICANT: SLUSARCZYK, HEIKE
APPLICANT: SLUSARCZYK, HEIKE
APPLICANT: SLUSARCZYK, HEIKE
APPLICANT: SLUSARCZYK, HOWER:
CURRENT FILING DATE: 2002-12-04
; CURRENT APPLICATION WUMBER: US/10/309,294
; CURRENT FILING DATE: 2002-12-04
; PRIOR PILING DATE: 2002-12-04
; PRIOR FILING DATE: 2002-12-04
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SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 1398
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; OTHER INFORMATION:
US-10-309-294-1
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US-10-125-761-744

Publication No. US20030119018A1

GENERAL INFORMATION:

APPLICANT: CMURA, SATOSHI

APPLICANT: ISHIKAWA, JUN

APPLICANT: SHIRAW, HARUO

APPLICANT: SHIRAW, HAROSHI

APPLICANT: SHIRAW, TADAYOSHI

APPLICANT: SHIRA, TADAYOSHI

APPLICANT: SHIRA, TADAYOSHI

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LENGTH: 1512
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셤	675 GATGCTCGGCGCCATCGGAGCCGATCCGAAGGACCC 713

Search completed: June 27, 2004, 13:09:21 Job time : 756.551 secs